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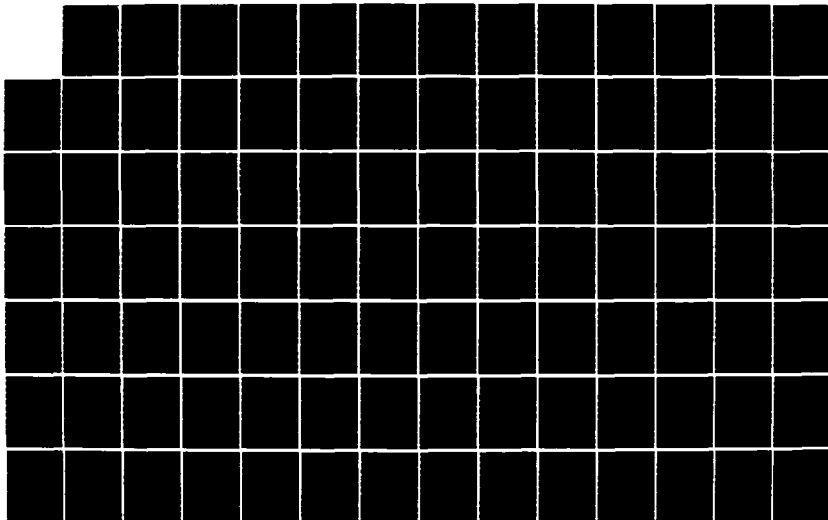
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L R HAURY ET AL. OCT 86 SIO-REF-86-23 N00014-85-C-0104

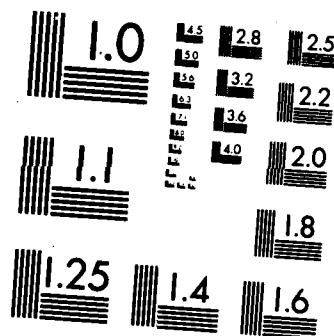
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data report

FRONTS CRUISE

Leg I: 1 - 11 July 1985

Leg II: 12 - 23 July 1985

SIO Reference 86-23
October 1986

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| 1. REPORT NUMBER SIO Reference No. 86-23 | 2. GOVT ACCESSION NO. 40-A174002 | 3. RECIPIENT'S CATALOG NUMBER |
| 4. TITLE (and Subtitle) FRONTS CRUISE: Leg I: 1 - 11 July 1985 Leg II: 12 - 23 July 1985 | | 5. TYPE OF REPORT & PERIOD COVERED |
| | | 6. PERFORMING ORG. REPORT NUMBER |
| 7. AUTHOR(s) L. R. Haury, P. M. Poulain, A. W. Mantyla, E. L. Venrick, and P. P. Niiler | | 8. CONTRACT OR GRANT NUMBER(s) N00014-85-C-0104 |
| 9. PERFORMING ORGANIZATION NAME AND ADDRESS Scripps Institution of Oceanography La Jolla, California 92093 | | 10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS |
| 11. CONTROLLING OFFICE NAME AND ADDRESS Office of Naval Research Arlington, Virginia 22217 | | 12. REPORT DATE October 1986 |
| | | 13. NUMBER OF PAGES 133 |
| 14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) | | 15. SECURITY CLASS. (of this report) unclassified |
| | | 15a. DECLASSIFICATION/DOWNGRADING SCHEDULE |
| 16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited. | | |
| 17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) | | |
| 18. SUPPLEMENTARY NOTES | | |
| 19. KEY WORDS (Continue on reverse side if necessary and identify by block number) | | |
| 20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The data in this report were collected from 1 to 23 July 1985 on the two legs of the FRONTS cruise aboard RV <u>New Horizon</u> of the Scripps Institution of Oceanography. The data were collected and processed by personnel of the Ocean Research Division (ORD), the Marine Life Research Group (MLRG), the Instituto Nacional de Pesca (INP), the Secretaria de Marina, and the Centro de Investigacion Cientifica y de Educacion Superior de Ensenada (CICESE). The purpose of the cruise was to describe the vertical and horizontal structure and dynamics of the physical, chemical, and biological properties... | | |

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UNIVERSITY OF CALIFORNIA
SCRIPPS INSTITUTION OF OCEANOGRAPHY

FRONTS CRUISE

LEG I: 1 - 11 July 1985

LEG II: 12 - 23 July 1985

L. R. Haury, P. M. Poulain, A. W. Mantyla, E. L. Venrick, and P. P. Niiler

Sponsored by
Office of Naval Research
and
Marine Life Research Group,
Scripps Institution of Oceanography

SIO Reference 86-23

October 1986

Approved for distribution:


Edward A. Frieman, Director

CONTENTS

| | |
|---|------------|
| Introduction | 3 |
| Literature Cited | 7 |
| List of Figures | 9 |
| Personnel | 15 |
| Tabulated CTD Data and Plots, Leg I | 16 |
| Station and Cast Description, Leg II | 99 |
| Tabulated Hydrographic Cast Data | 100 |
| Tabulated Primary Productivity Cast Data | 120 |
| Tabulated Macrozooplankton Data | 124 |
| Distribution List | 130 |



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INTRODUCTION

The data in this report were collected from 1 to 23 July 1985 on the two legs of the FRONTS cruise aboard RV *New Horizon* of the Scripps Institution of Oceanography. The data were collected and processed by personnel of the Ocean Research Division (ORD), the Marine Life Research Group (MLRG), the Instituto Nacional de Pesca (INP), the Secretaria de Marina, and the Centro de Investigacion Cientifica y de Educacion Superior de Ensenada (CICESE).

The purpose of the cruise was to describe the vertical and horizontal structure and dynamics of the physical, chemical, and biological properties associated with a persistent, seasonally-recurring front in the California Current southwest of San Diego, California. (Peláez and McGowan, in press).

STANDARD PROCEDURES

Conductivity/Temperature/Depth Recorder (CTD) Data

A Neil Brown Instrument Systems Mark III CTD was used during Leg I on 81 stations with lowerings to 300 m or 500 m. The second portion of the CTD survey made three cross-sections through a strong cold frontal area detected in satellite Advanced Very High Resolution Radiometer images sent to the ship. Temperature and salinity calibration samples were taken with Niskin bottles hung on the CTD wire on five of the CTD casts. Station position was determined from Loran C fixes. Wind speed and direction were derived from the S.A.I.L. data acquisition system; anemometer height was about 12 m above sea level. XBTs were dropped between CTD stations; these data are not presented here.

CTD data recording and monitoring used a Hewlett-Packard HP 9000, Series 200 computer. After conversion into digital form, the 25Hz-sampled data of conductivity, temperature (Platinum Resistance Thermometer), fast temperature, pressure and oxygen concentration were recorded on 9-track magnetic tapes. 10 m interpolated observations were recorded onto micro-floppy disks. Coarse profiles were plotted and, as a back-up, the Frequency Shift Key modulated signals were recorded onto audio cassettes.

In the laboratory, the raw data from the magnetic tapes were further processed in the following sequence:

- (a) Bad points and frames were rejected. Pressure, temperature (PRT) and conductivity were decoded. The conductivity signal was lagged for despiking salinity; a simple recursive filter was applied:

$$C(n) = \alpha C(n-1) + (1-\alpha)C_0(n)$$

where $C_0(n)$ is the observed conductivity value and $C(n)$ is the filtered value of the n^{th} scan, and α is a constant determined by successive despiking attempts on one chosen profile. A value of 0.830 was taken for α , corresponding to a time constant of 0.215 seconds.

Averages over 1 sec or 25 frames, whichever came first, were computed.

- (b) Residual temperature dependence was corrected by subtracting from the readings of pressure:
 - for the downcast, a linear function of pressure varying from the initial offset at the surface to the after-cast offset at the bottom.
 - for the upcast, the constant after-cast pressure offset.

Hysteresis and non-linearity of the sensors were not corrected, as they were negligible for these shallow water casts. Neil Brown sensor calibrations were used as there was no statistically significant difference between bottle calibration data and both temperature and salinity. After pressure-to-depth conversion, data were linearly interpolated every 1 meter.

- (c) From the interpolated data set, downcast values were extracted at 20 standard depths. Potential temperature and density, and geopotential anomaly were computed. Details on the algorithms used can be found in Fofonoff (1985).

Remarks:

— Stations 26 and 78 could not be retrieved from the 9-track tapes. The 10 m interpolated downcast data from the floppy discs were substituted for these stations. Comparisons of the two casts with adjacent stations showed good agreement.

— The oxygen data are not presented in this report.

Hydrographic Cast Data

The hydrographic casts made on Leg II consisted of 20 Nansen bottles lowered to a maximum sampling depth of 1000 meters. Temperature, salinity, oxygen, and nutrients were determined for all depths sampled. Chlorophyll *a* and phaeopigments were determined from the top 12 depths.

Paired protected reversing thermometers were used to determine temperatures which are recorded to hundredths of a degree Celsius. Sampling bottles used below a depth of 100 meters were equipped with unprotected thermometers for determination of the depth of sampling.

Salinity samples were analyzed at sea using inductive-type salinometers. Salinometers were standardized with sub-standard seawater. The sub-standard water was prepared from filtered seawater collected in 30-liter Niskin bottles from a depth of 400 m, gently evaporated to increase the salinity to near 35‰. Periodic checks on the concentration of the substandard were made by comparison with Wormley Standard Seawater, batch P-78. The salinity values are reported to three decimal places.

Dissolved oxygen was determined by the Winkler method as modified by Carpenter (1965), using the equipment and procedure outlined by Anderson (1971). Percent oxygen saturation was calculated from the equations of Weiss (1970).

Silicate, phosphate, nitrate, and nitrite nutrients were determined at sea using an automated analyzer. The procedures used are similar to those described in Atlas *et al.* (1971).

Chlorophyll was measured with a fluorometric technique (Yentsch and Menzel, 1963; Holm-Hansen *et al.*, 1965). Subsamples were drawn from the Nansen bottles and filtered onto GF/C filters. The filters were placed in scintillation vials containing 10 ml of 90% acetone and the pigments were extracted in the dark in a refrigerator for a period of one to three days. The samples were then brought to room temperature and the fluorescence of the sample was determined, before and after acidification, with a Turner 111 fluorometer. The potential biases in the technique are discussed in Venrick and Hayward (1984).

The observed data have been evaluated using the methodology described by Klein (1973). This involves consideration of their variation as functions of density or depth and their relation to each other, and comparisons with adjacent observations.

Primary Productivity Casts

Primary production was estimated from ^{14}C uptake using a simulated *in situ* technique. Light penetration was estimated from the Secchi depth (assuming that the 1% light level is three times the Secchi depth). Vertical profiles of photosynthetically active radiation (PAR) were obtained just after the Secchi disk casts with a Biospherical Instruments quantum scalar irradiance meter, model QSP 170BR; these data are not presented here. Six depths, corresponding to predetermined levels of light penetration, were sampled with 5 l Niskin bottles. Triplicate subsamples were drawn from each depth into 125 ml polycarbonate incubation bottles which were inoculated with $10\ \mu\text{Ci}$ of ^{14}C as

NaHCO₃. Two light and one dark (control) bottle were then incubated approximately from local apparent noon to civil twilight in sea water cooled incubators with neutral density screens which simulate the *in situ* light levels. At the end of the incubation, the samples were filtered onto HA milipore filters and placed in scintillation vials. One-half ml of 10% HCl was added to each sample, which was then allowed to sit without a cap, at room temperature for 12 hours (after Lean and Burnison, 1979). Following this, 10 ml of scintillation fluor were added to each sample and the samples were returned to S.I.O. where the radioactivity was determined with a scintillation counter.

Macrozooplankton Samples

Bongo Net Tows -- Macrozooplankton was sampled at each station during Leg II with a 71 cm mouth diameter paired net (bongo net) equipped with 0.505 mm plankton mesh. The nets were towed obliquely from 210 m to the surface; tow time for a standard tow was 21.5 minutes. Volumes filtered were determined from flowmeter readings and the mouth area of the net. Both samples were retained and preserved. The biomass, as wet displacement volume, after removal of large (> 5 ml) organisms, was determined in the laboratory ashore. These procedures are summarized in greater detail in Kramer *et al.* (1972).

MOCNESS Net Tows -- A Multiple Opening-Closing Net and Environmental Sensing System (MOCNESS) was used to sample vertical distributions of macrozooplankton at two geographic locations during the second leg of the cruise. This net system has an effective mouth area of 1 m² and was equipped with nets of 333 μ m mesh aperture. The 20 nets mounted on the frame permit collections of zooplankton from 16 strata. A more complete description of the system and its operation is presented in Wiebe *et al.* (1985). Wet displacement volumes were measured as with the bongo net samples.

TABULATED DATA

CTD Cast Data

CTD cast dates are reported in Julian days and times in Greenwich Mean Time; date and time refer to the start time of the cast. Wind direction is presented using the World Meteorological Organization Code WMO 885/887, i.e., 1=[5 to 14 degrees], ..., 36=[355 to 4 degrees], 0=no wind.

The flag at each depth has the following meaning:

- 1 = normal
- 2 = data missing, nearest depth value(s) has(ve) been used
- 3 = downcast data missing, filled with upcast values
- 4 = extrapolated values

A factor of 0.1 is needed if one wants to have the geopotential anomaly in dynamic meters.

Plots of each CTD cast are presented with the tabulated data. Downcast and upcast values of temperature, salinity and potential density are represented by thick and thin lines respectively; station number is in upper right corner of each plot.

Hydrographic Cast Data

The reported hydrographic cast time is the Greenwich Mean Time (GMT) of the messenger release. Weather conditions have been coded using WMO Code 4051. Observed and interpolated standard depth data from hydrographic casts have been interspersed and are presented together sequentially by depth. Interpolated or extrapolated standard level data are noted by the footnote "ISL" printed after the depth. Density-related parameters have been calculated from the International Equation of State of Seawater 1980 (EOS80, UNESCO, 1981). Some of the differences between EOS80 and the older equations-of-state are discussed in the introduction to SIO Ref. 84-18. Computed values of potential temperature, sigma-theta, specific volume anomaly (SVA), dynamic height or geopotential anomaly, and pressure are included with both observed and interpolated standard depth levels.

Primary Productivity Casts

In addition to the normal hydrographic data, the tabulated data include: the light levels at which the samples were incubated, the uptake from each of the replicate light bottles (uptake 1 and uptake 2) which have been corrected for dark uptake by subtracting the dark value, the mean of the two uptake values, the dark uptake, chlorophyll and phaeophytin. The uptake values shown are the total for the incubation period. The times of local apparent noon (LAN), civil twilight, and the vertically integrated value of the mean uptake from the surface to the deepest sample depth (assuming that the shallowest measured value extends to the surface and that negative values are zero) are also shown for each experiment. The uptake data have been presented to two significant digits (values < 1.00) or one decimal (values > 1.00). The higher production values may not warrant all of the significant digits presented. Incubation time, LAN, and civil twilight are given in local Pacific Standard Time (PST); to convert to GMT, add eight hours to the PST time.

Macrozooplankton Data

Macrozooplankton biomass volumes are tabulated as total biomass volume ($\text{cm}^3/1000\text{m}^3$ strained) minus the volume of larger organisms. Net tow times are reported in Pacific Daylight Time (PDT, GMT = PDT + 7 hours).

Acknowledgements

This cruise was sponsored by Office of Naval Research contract N00014-85-C-0104 to P. P. Niiler and L. R. Haury, and by the Marine Life Research Group of Scripps Institution of Oceanography. Special thanks for Leg I go to Dr. L. Armi for providing the Neil Brown CTD and computer equipment, R. Olsen for helping in data acquisition and processing, and P. Flament for providing the data processing software. The portions of the cruise conducted in Mexican waters were made under the authority of Mexican Secretariat of External Relations Note No. 302082. We thank our Mexican colleagues who participated in the cruise for their hard work and cooperation that helped make the cruise a success.

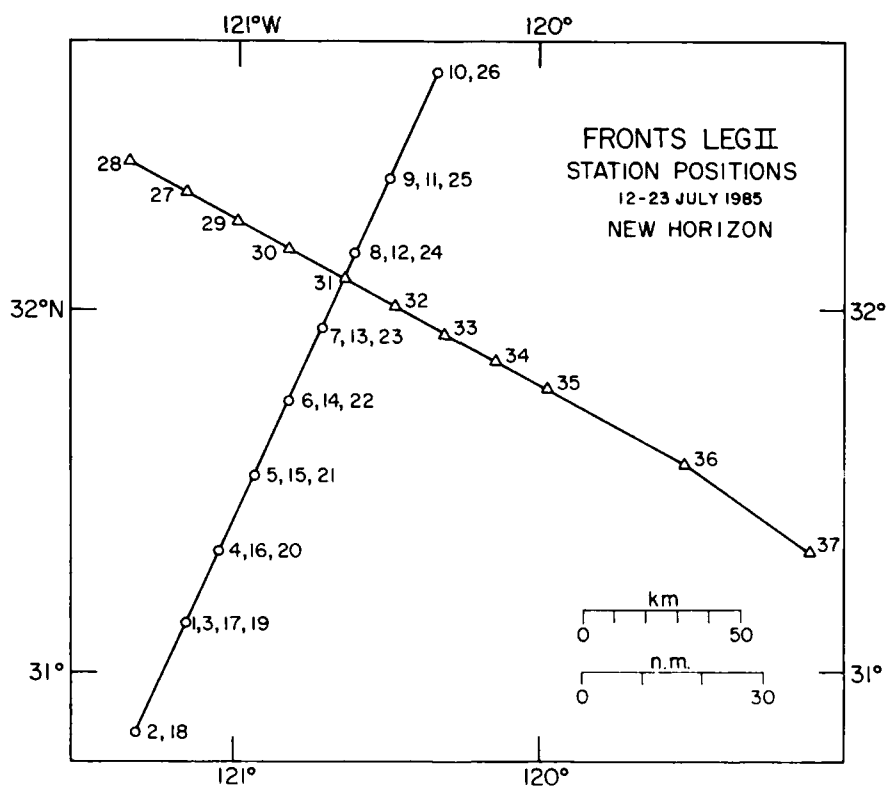
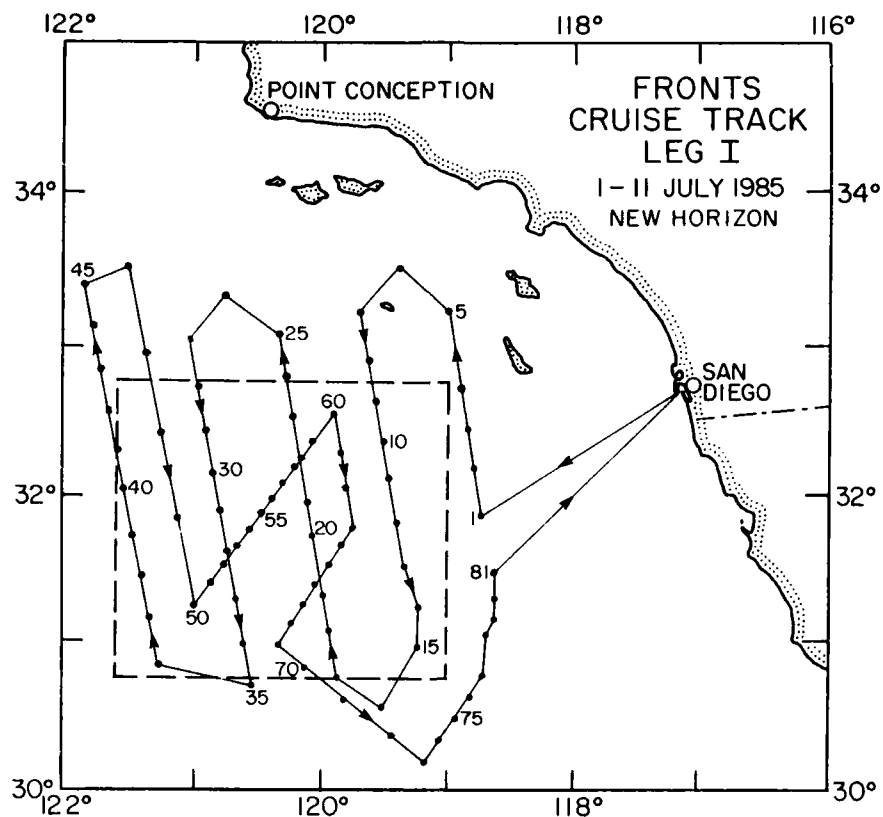
LITERATURE CITED

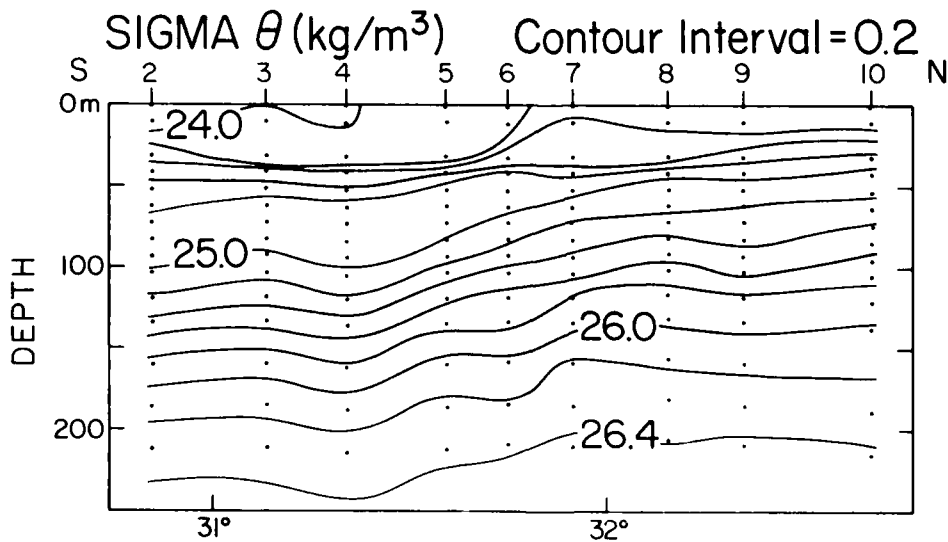
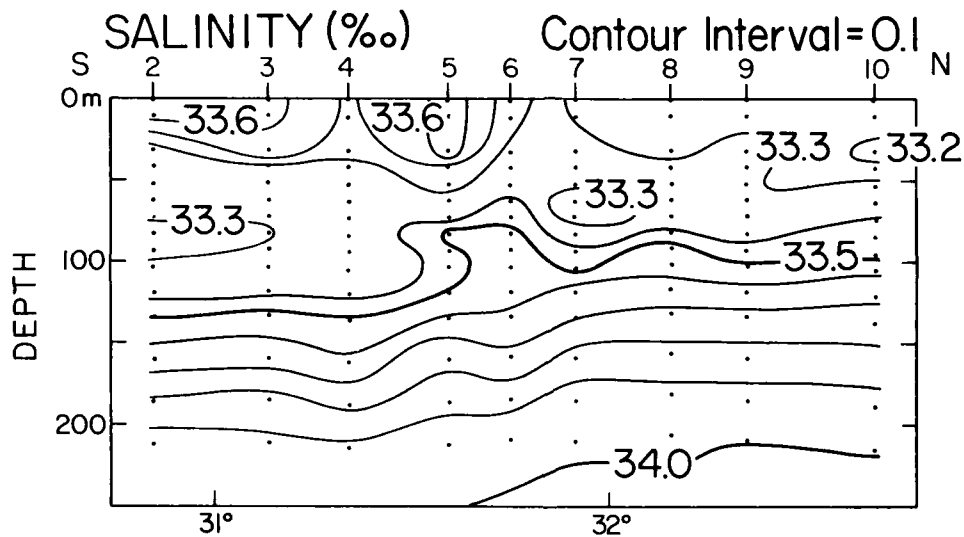
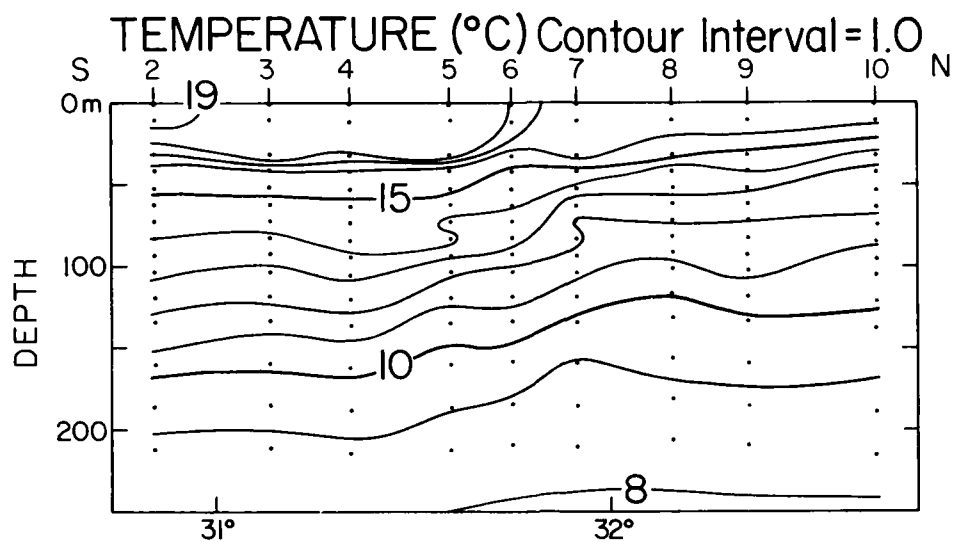
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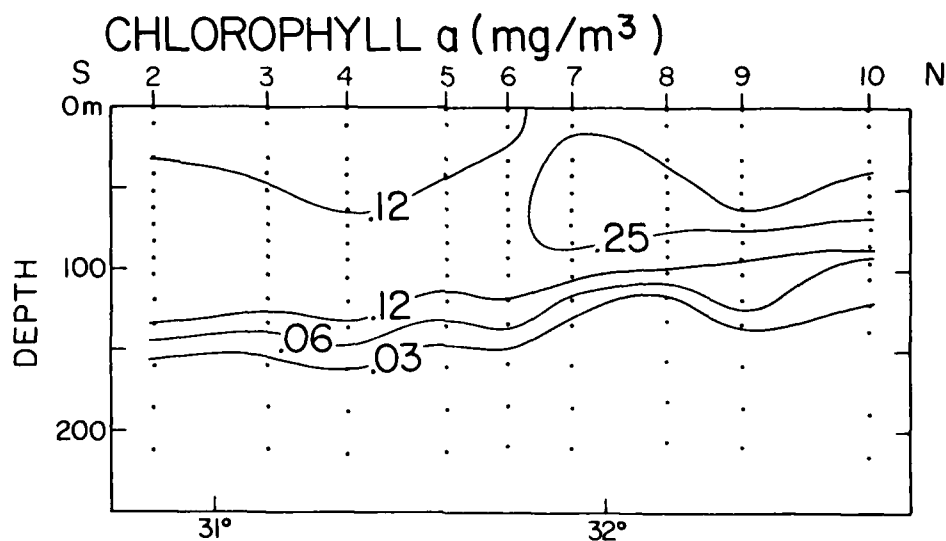
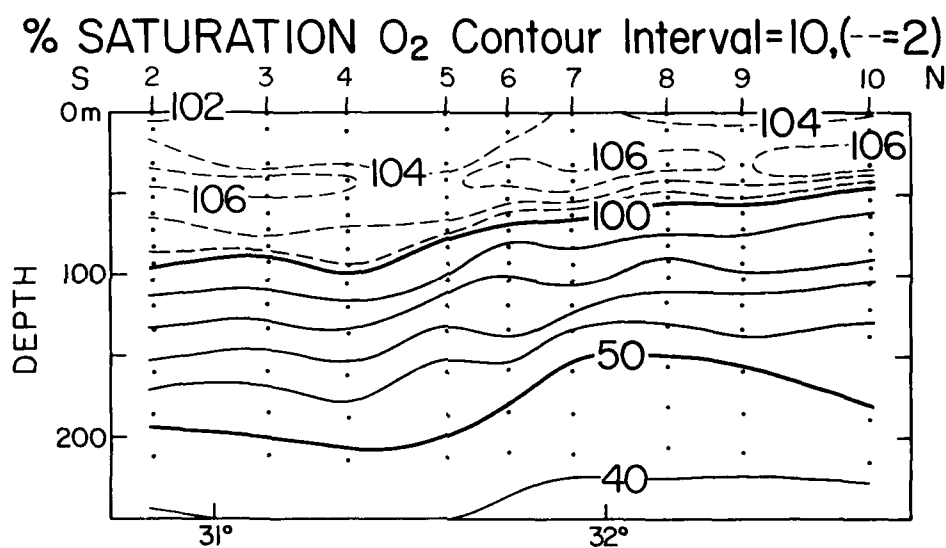
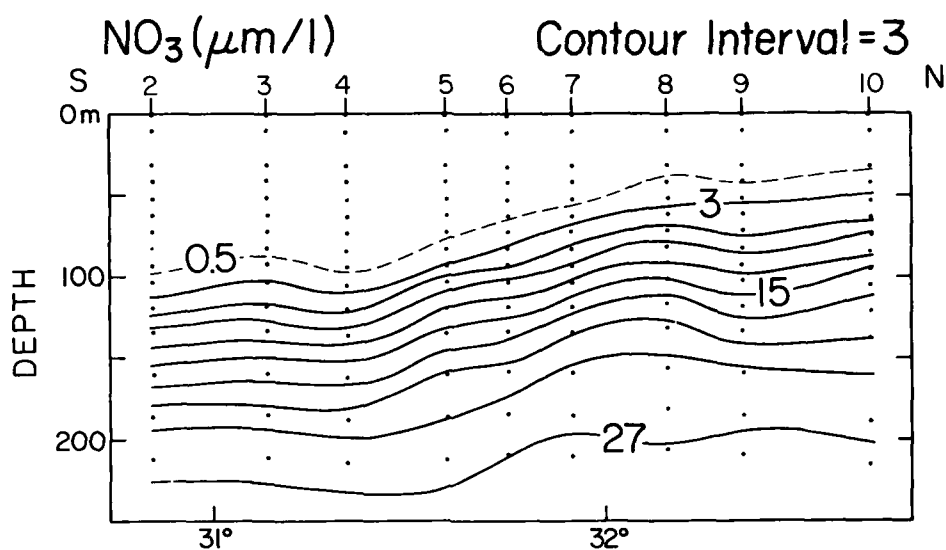
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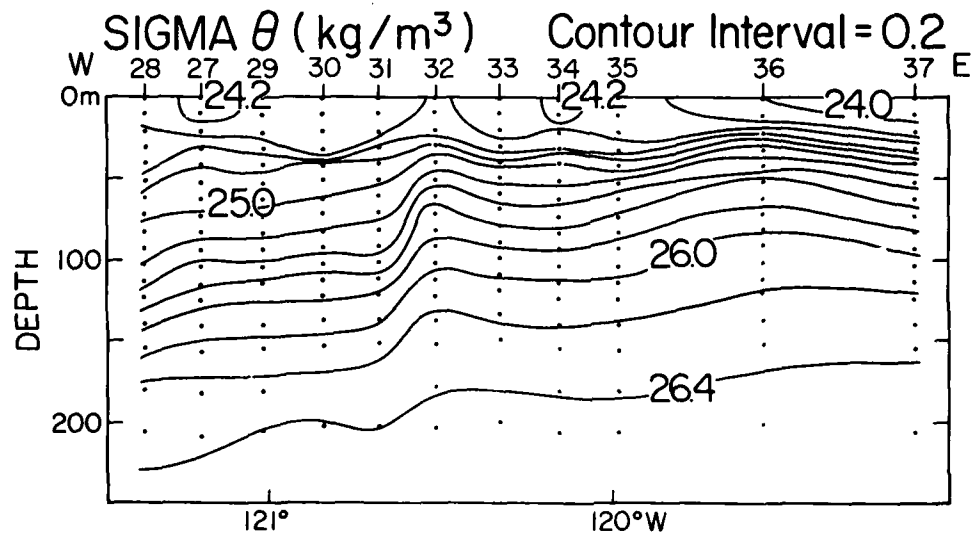
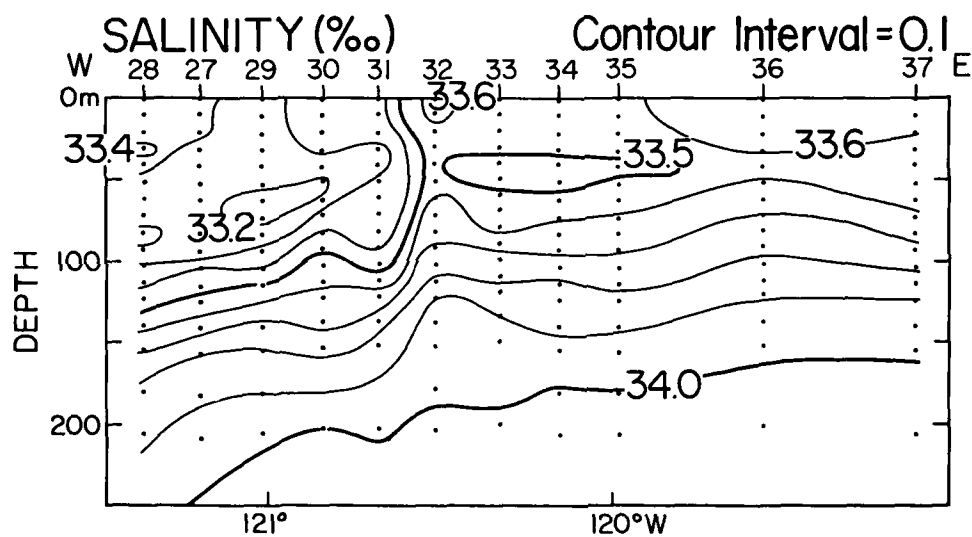
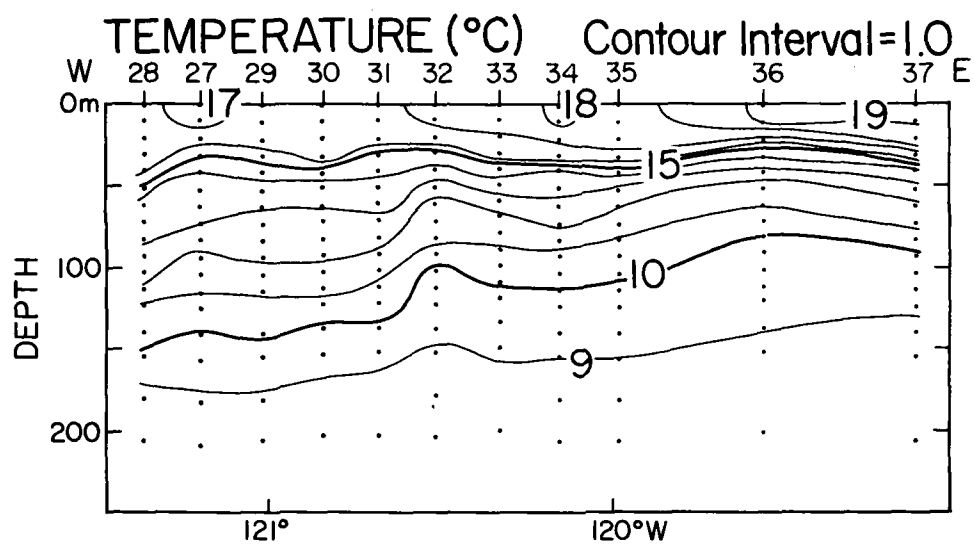
FRONTS Cruise

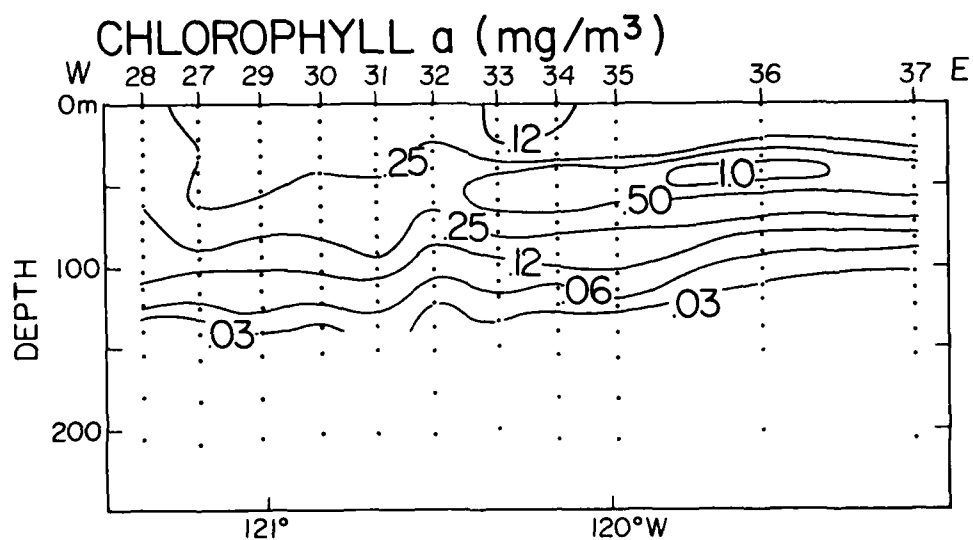
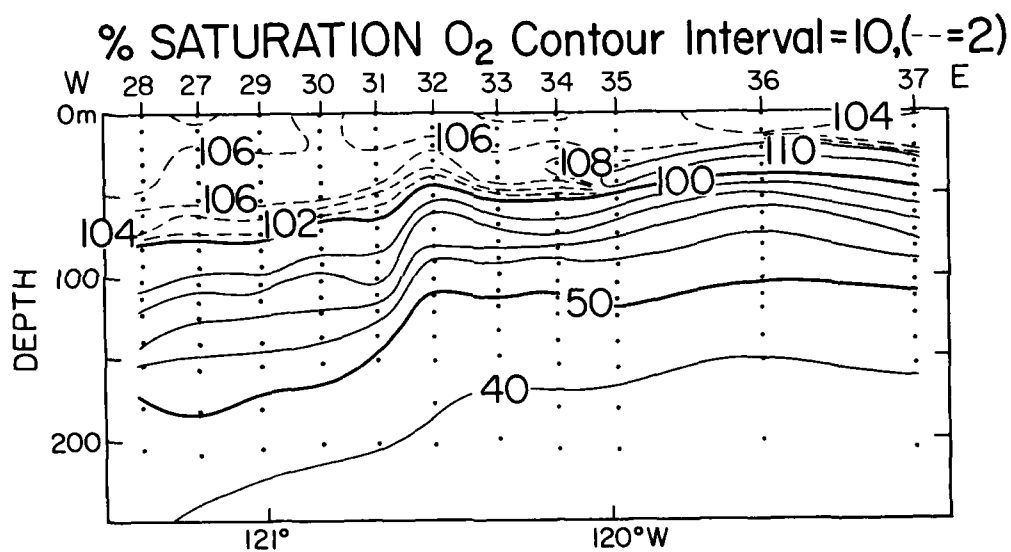
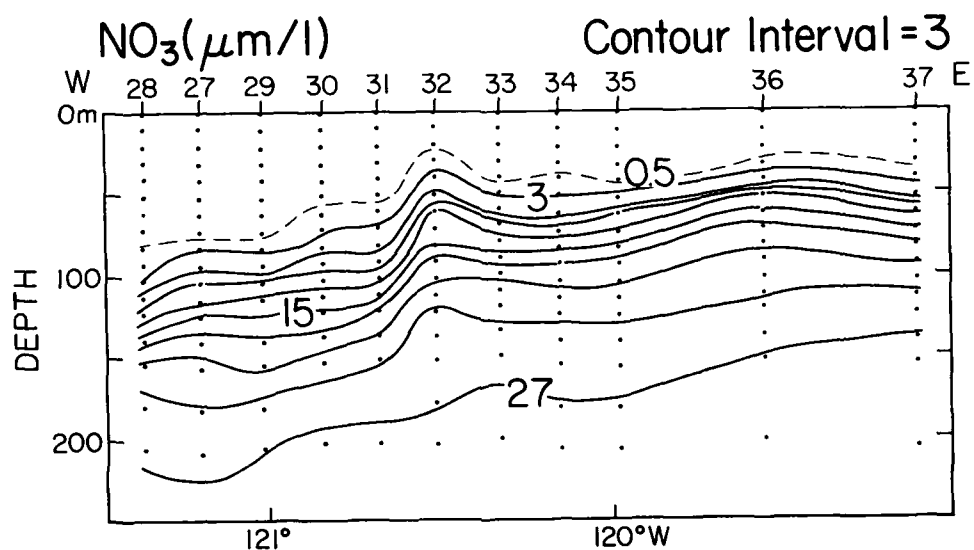
1. FRONTS Leg I, cruise track and CTD station positions; dashed box outlines region shown in Figure 2.
2. FRONTS Leg II, station positions.
3. Leg II: temperature, salinity, and density sections to 250 m on south-to-north transect from Station 2 to Station 10.
4. Leg II: nitrate, percent oxygen saturation and chlorophyll *a* sections to 250 m on south-to-north transect from Station 2 to Station 10.
5. Leg II: temperature, salinity, and density sections to 250 m on west-to-east transect from Station 28 to Station 37.
6. Leg II: nitrate, percent oxygen saturation and chlorophyll *a* sections to 250 m on west-to-east transect from Station 28 to Station 37.











PERSONNEL

FRONTS CRUISE

SHIP'S CAPTAIN

Munsch, Phillip L., RV *New Horizon*

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

LEG I: 1 - 11 July 1985

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LEG II: 12 - 23 July 1985

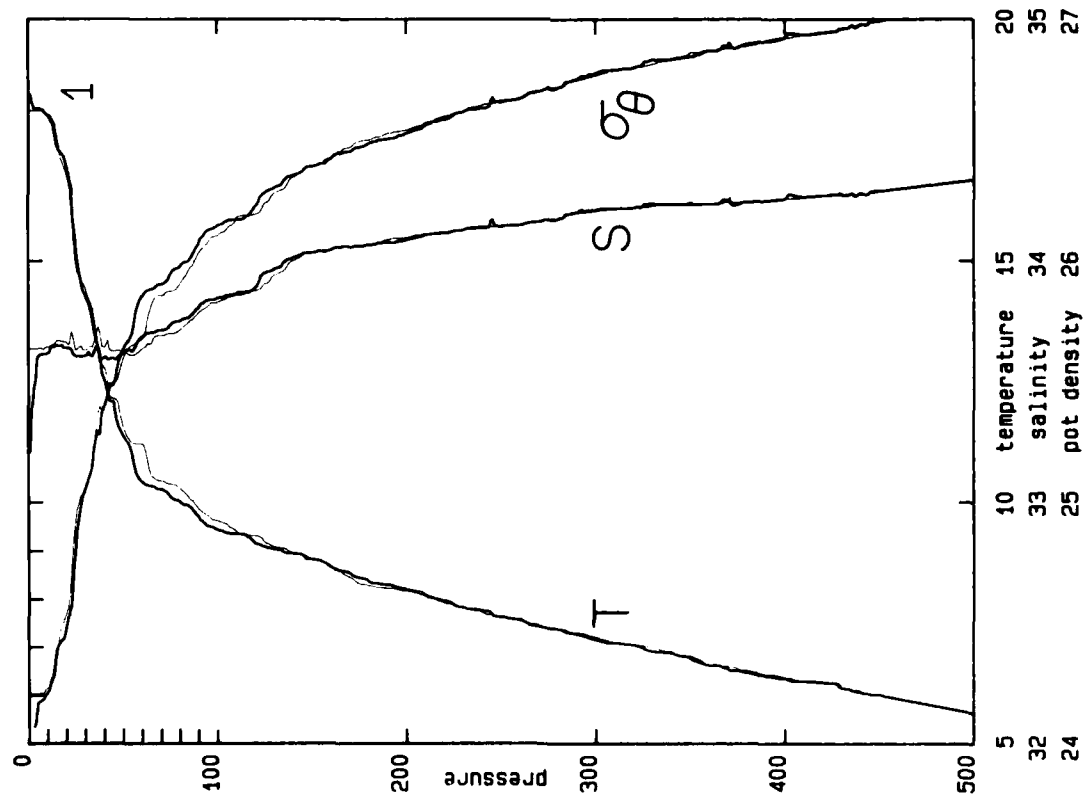
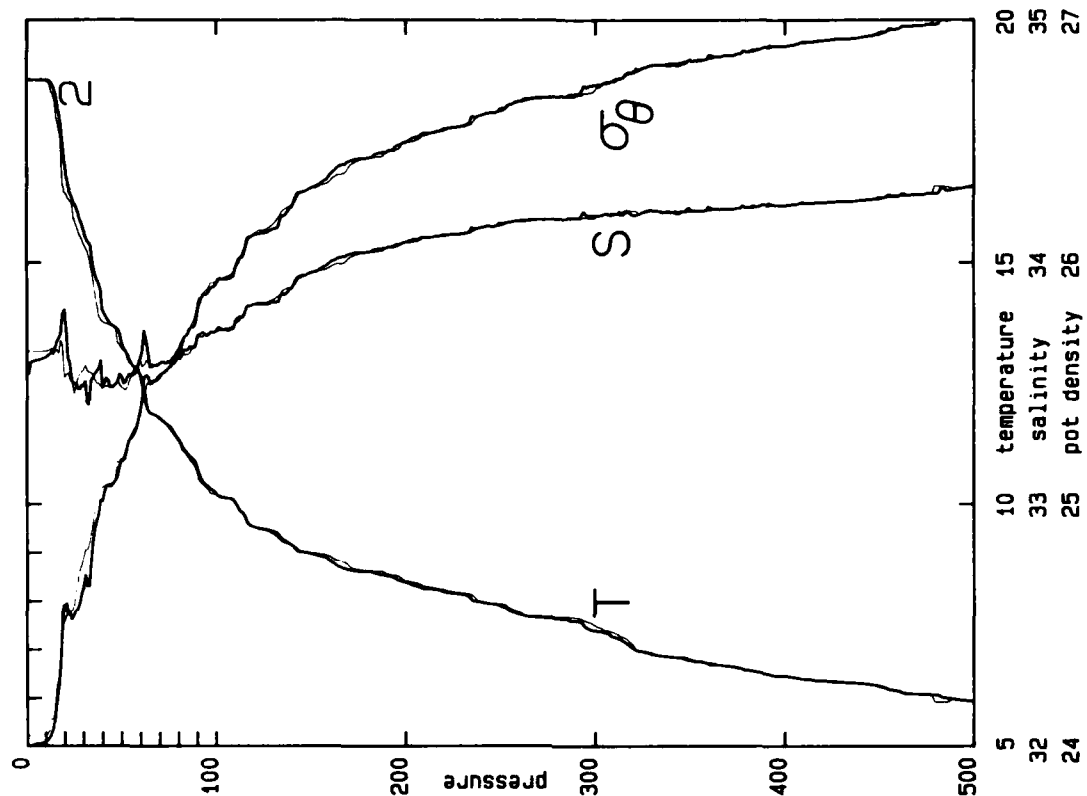
| | |
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| Willhoite, Brian | Electronics Technician, SIO |
| Wilson, Robert C. | Marine Technician, SIO |

RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 1 | 183: 8:45 | 31 49.9 N | 118 43.1 W | 15 | 4 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 18.446 | 33.208 | 18.446 | 23.792 | 0. | 2 |
| 10 | 18.006 | 33.618 | 18.004 | 24.214 | 0.38 | 1 |
| 20 | 16.979 | 33.642 | 16.976 | 24.479 | 0.74 | 1 |
| 30 | 14.278 | 33.608 | 14.274 | 25.055 | 1.06 | 1 |
| 40 | 12.523 | 33.604 | 12.518 | 25.407 | 1.33 | 1 |
| 50 | 11.390 | 33.622 | 11.384 | 25.634 | 1.58 | 1 |
| 60 | 10.425 | 33.688 | 10.418 | 25.857 | 1.80 | 1 |
| 70 | 10.266 | 33.715 | 10.258 | 25.905 | 2.02 | 1 |
| 80 | 10.013 | 33.752 | 10.004 | 25.977 | 2.23 | 1 |
| 90 | 9.676 | 33.808 | 9.666 | 26.077 | 2.43 | 1 |
| 100 | 9.423 | 33.848 | 9.412 | 26.150 | 2.62 | 1 |
| 125 | 9.069 | 33.950 | 9.056 | 26.287 | 3.08 | 1 |
| 150 | 8.811 | 34.033 | 8.795 | 26.394 | 3.51 | 1 |
| 175 | 8.422 | 34.059 | 8.404 | 26.474 | 3.91 | 1 |
| 200 | 8.178 | 34.089 | 8.158 | 26.535 | 4.30 | 1 |
| 225 | 7.845 | 34.124 | 7.823 | 26.612 | 4.68 | 1 |
| 250 | 7.616 | 34.140 | 7.591 | 26.658 | 5.04 | 1 |
| 300 | 7.133 | 34.215 | 7.105 | 26.786 | 5.73 | 1 |
| 400 | 6.303 | 34.276 | 6.267 | 26.947 | 6.97 | 1 |
| 500 | 5.585 | 34.342 | 5.543 | 27.090 | 8.09 | 4 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|----------|--------------------------|----------------------|----------------------------|------|
| 2 | 183:11:37 | 32 9.1 N | 118 46.1 W | 13 | 2 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 18.756 | 33.541 | 18.756 | 23.969 | 0. | 2 |
| 10 | 18.760 | 33.607 | 18.758 | 24.019 | 0.39 | 1 |
| 20 | 17.045 | 33.800 | 17.042 | 24.585 | 0.77 | 1 |
| 30 | 15.677 | 33.487 | 15.672 | 24.658 | 1.10 | 1 |
| 40 | 14.001 | 33.474 | 13.995 | 25.010 | 1.42 | 1 |
| 50 | 13.299 | 33.521 | 13.292 | 25.190 | 1.70 | 1 |
| 60 | 12.655 | 33.611 | 12.647 | 25.387 | 1.98 | 1 |
| 70 | 11.788 | 33.584 | 11.779 | 25.531 | 2.22 | 1 |
| 80 | 11.339 | 33.612 | 11.329 | 25.636 | 2.47 | 1 |
| 90 | 10.732 | 33.708 | 10.721 | 25.819 | 2.70 | 1 |
| 100 | 10.199 | 33.725 | 10.187 | 25.925 | 2.91 | 1 |
| 125 | 9.477 | 33.828 | 9.463 | 26.126 | 3.41 | 1 |
| 150 | 8.962 | 33.959 | 8.946 | 26.312 | 3.87 | 1 |
| 175 | 8.610 | 34.041 | 8.592 | 26.432 | 4.29 | 1 |
| 200 | 8.377 | 34.086 | 8.356 | 26.503 | 4.69 | 1 |
| 225 | 8.149 | 34.115 | 8.126 | 26.560 | 5.08 | 1 |
| 250 | 7.867 | 34.163 | 7.842 | 26.640 | 5.45 | 1 |
| 300 | 7.376 | 34.195 | 7.347 | 26.736 | 6.15 | 1 |
| 400 | 6.439 | 34.239 | 6.403 | 26.900 | 7.42 | 1 |
| 500 | 5.896 | 34.321 | 5.852 | 27.035 | 8.58 | 4 |

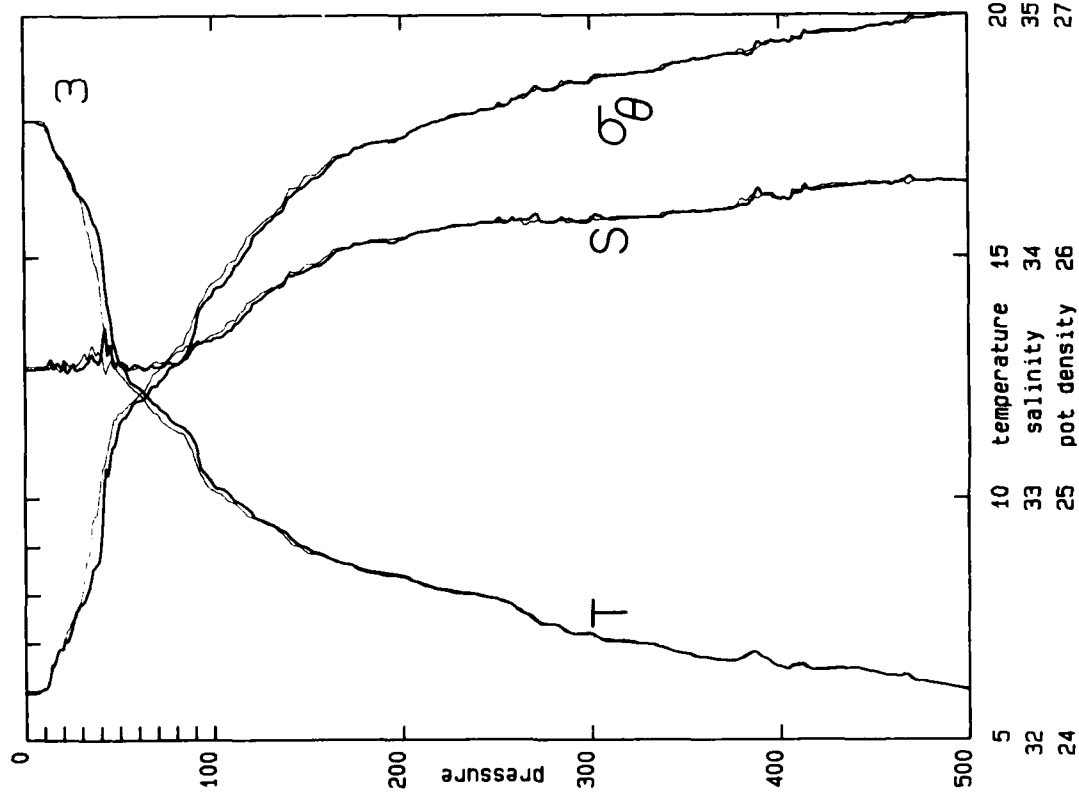
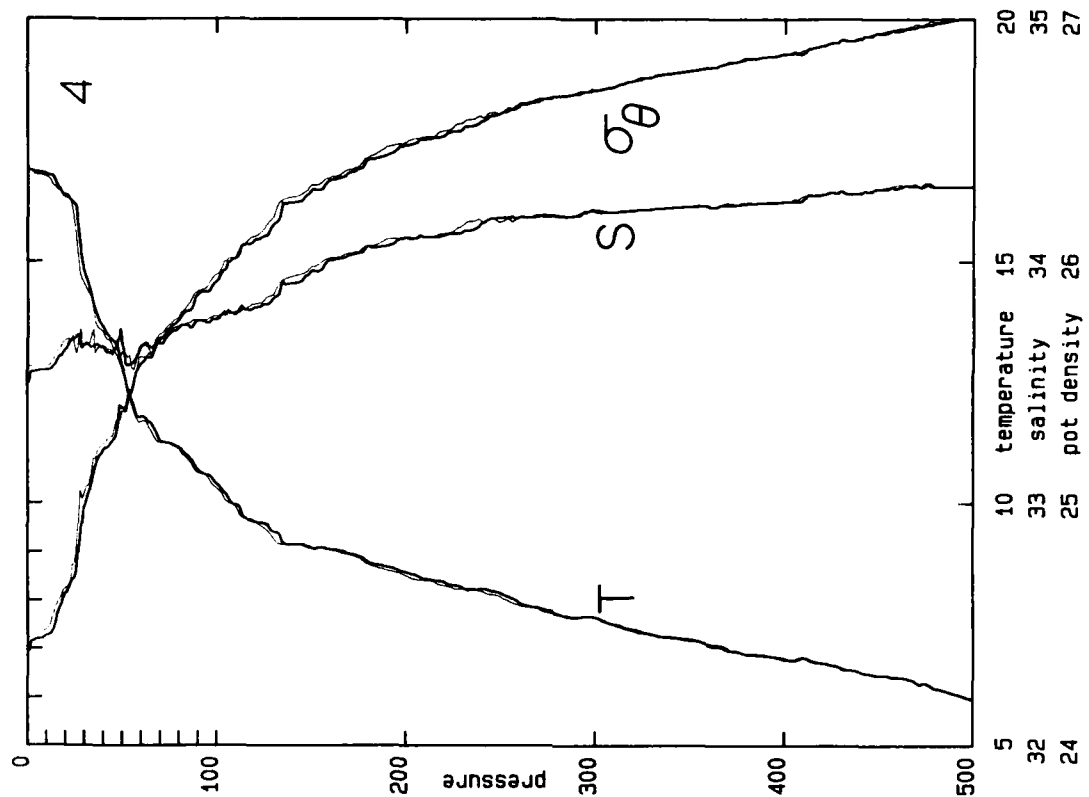


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 3 | 183:13:55 | 32 25.1 N | 118 49.1 W | 12 | 3 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 17.818 | 33.535 | 17.818 | 24.196 | 0. | 2 |
| 10 | 17.746 | 33.538 | 17.744 | 24.216 | 0.37 | 1 |
| 20 | 17.048 | 33.535 | 17.045 | 24.380 | 0.74 | 1 |
| 30 | 16.263 | 33.543 | 16.258 | 24.569 | 1.08 | 1 |
| 40 | 15.367 | 33.578 | 15.361 | 24.797 | 1.41 | 1 |
| 50 | 12.830 | 33.565 | 12.823 | 25.317 | 1.69 | 1 |
| 60 | 12.305 | 33.552 | 12.297 | 25.409 | 1.96 | 1 |
| 70 | 11.924 | 33.542 | 11.915 | 25.473 | 2.21 | 1 |
| 80 | 11.535 | 33.557 | 11.525 | 25.557 | 2.46 | 1 |
| 90 | 11.115 | 33.634 | 11.104 | 25.694 | 2.70 | 1 |
| 100 | 10.259 | 33.668 | 10.247 | 25.870 | 2.92 | 1 |
| 125 | 9.552 | 33.828 | 9.538 | 26.114 | 3.44 | 1 |
| 150 | 8.940 | 33.950 | 8.924 | 26.308 | 3.89 | 1 |
| 175 | 8.531 | 34.054 | 8.513 | 26.454 | 4.31 | 1 |
| 200 | 8.356 | 34.074 | 8.335 | 26.497 | 4.71 | 1 |
| 225 | 8.039 | 34.126 | 8.016 | 26.585 | 5.09 | 1 |
| 250 | 7.876 | 34.156 | 7.851 | 26.633 | 5.46 | 1 |
| 300 | 7.158 | 34.170 | 7.129 | 26.747 | 6.16 | 1 |
| 400 | 6.468 | 34.239 | 6.432 | 26.896 | 7.46 | 1 |
| 500 | 5.972 | 34.304 | 5.928 | 27.012 | 8.62 | 4 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 4 | 183:16: 2 | 32 41.4 N | 118 51.7 W | 8 | 2 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 16.874 | 33.500 | 16.874 | 24.394 | 0. | 2 |
| 10 | 16.789 | 33.552 | 16.787 | 24.454 | 0.35 | 1 |
| 20 | 16.308 | 33.633 | 16.305 | 24.628 | 0.69 | 1 |
| 30 | 14.779 | 33.658 | 14.775 | 24.987 | 1.01 | 1 |
| 40 | 13.627 | 33.649 | 13.621 | 25.222 | 1.30 | 1 |
| 50 | 12.822 | 33.660 | 12.815 | 25.392 | 1.57 | 1 |
| 60 | 11.790 | 33.646 | 11.782 | 25.579 | 1.82 | 1 |
| 70 | 11.274 | 33.659 | 11.265 | 25.684 | 2.06 | 1 |
| 80 | 11.138 | 33.729 | 11.128 | 25.763 | 2.29 | 1 |
| 90 | 10.672 | 33.756 | 10.661 | 25.867 | 2.51 | 1 |
| 100 | 10.381 | 33.758 | 10.369 | 25.920 | 2.72 | 1 |
| 125 | 9.572 | 33.824 | 9.558 | 26.108 | 3.22 | 1 |
| 150 | 9.067 | 33.964 | 9.051 | 26.299 | 3.68 | 1 |
| 175 | 8.890 | 34.036 | 8.871 | 26.384 | 4.11 | 1 |
| 200 | 8.557 | 34.095 | 8.536 | 26.482 | 4.52 | 1 |
| 225 | 8.296 | 34.114 | 8.273 | 26.537 | 4.91 | 1 |
| 250 | 8.110 | 34.181 | 8.085 | 26.618 | 5.28 | 1 |
| 300 | 7.623 | 34.208 | 7.593 | 26.712 | 5.99 | 1 |
| 400 | 6.751 | 34.247 | 6.714 | 26.865 | 7.31 | 1 |
| 500 | 5.902 | 34.302 | 5.858 | 27.019 | 8.48 | 4 |

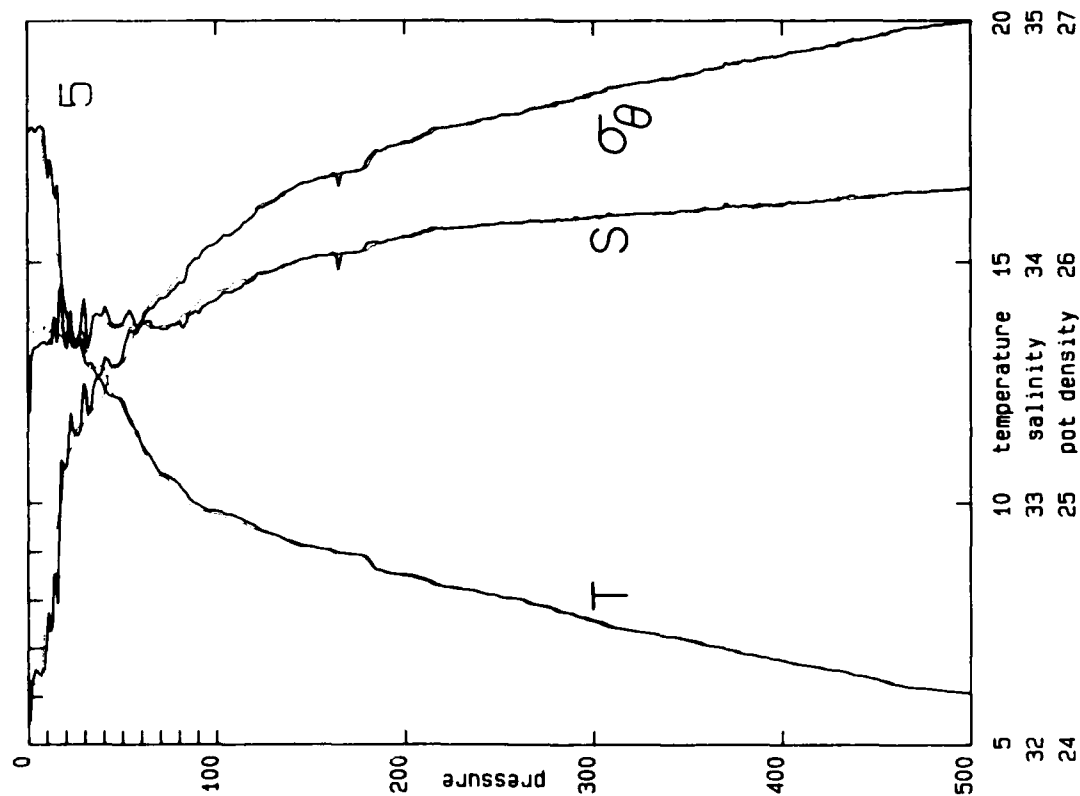
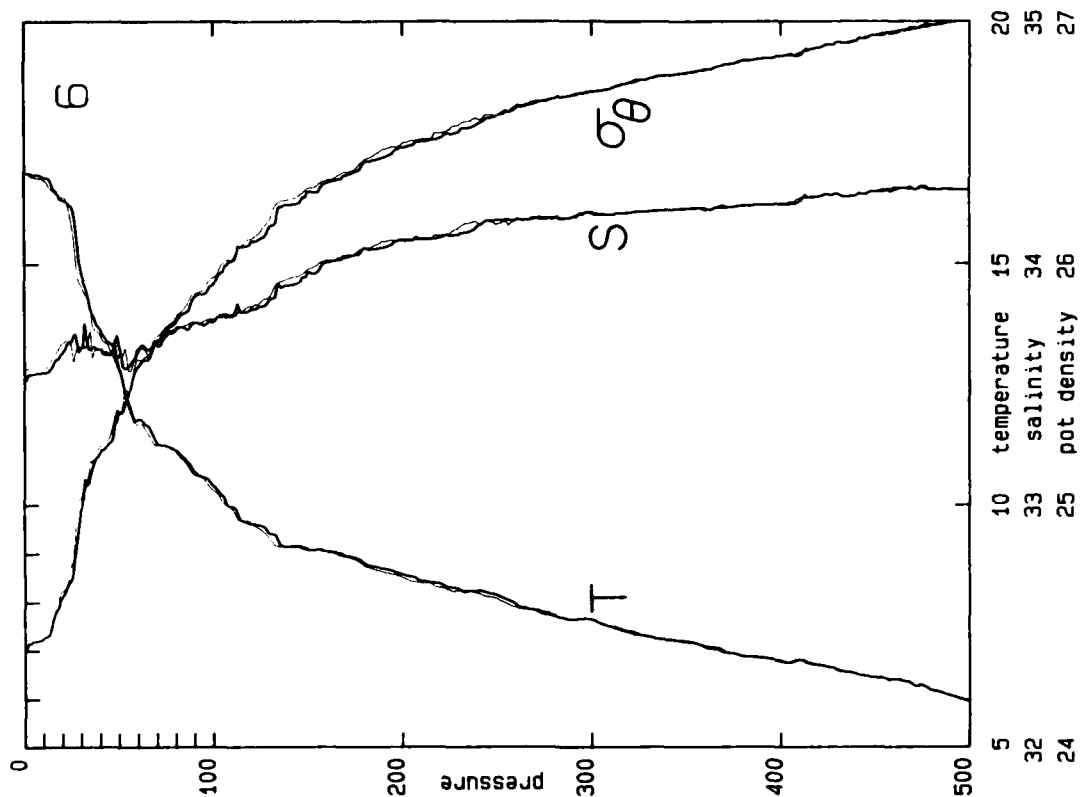


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 5 | 183:20:15 | 33 12.7 N | 118 59.5 W | 16 | 2 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 17.716 | 33.384 | 17.716 | 24.105 | 0. | 2 |
| 10 | 17.187 | 33.657 | 17.185 | 24.441 | 0.36 | 1 |
| 20 | 13.999 | 33.659 | 13.996 | 25.152 | 0.68 | 1 |
| 30 | 13.008 | 33.846 | 13.004 | 25.499 | 0.95 | 1 |
| 40 | 12.430 | 33.795 | 12.425 | 25.573 | 1.20 | 1 |
| 50 | 12.049 | 33.739 | 12.043 | 25.602 | 1.44 | 1 |
| 60 | 11.242 | 33.742 | 11.235 | 25.754 | 1.67 | 1 |
| 70 | 10.622 | 33.719 | 10.614 | 25.847 | 1.89 | 1 |
| 80 | 10.376 | 33.754 | 10.367 | 25.917 | 2.11 | 1 |
| 90 | 9.965 | 33.786 | 9.955 | 26.012 | 2.32 | 1 |
| 100 | 9.833 | 33.845 | 9.822 | 26.080 | 2.51 | 1 |
| 125 | 9.411 | 33.952 | 9.397 | 26.234 | 2.99 | 1 |
| 150 | 9.094 | 34.018 | 9.078 | 26.337 | 3.43 | 1 |
| 175 | 8.923 | 34.042 | 8.904 | 26.384 | 3.85 | 1 |
| 200 | 8.488 | 34.106 | 8.467 | 26.502 | 4.25 | 1 |
| 225 | 8.239 | 34.142 | 8.216 | 26.568 | 4.64 | 1 |
| 250 | 8.045 | 34.160 | 8.020 | 26.611 | 5.01 | 1 |
| 300 | 7.554 | 34.190 | 7.525 | 26.707 | 5.73 | 1 |
| 400 | 6.731 | 34.245 | 6.694 | 26.866 | 7.05 | 1 |
| 500 | 6.052 | 34.307 | 6.008 | 27.004 | 8.23 | 4 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 6 | 184: 6:10 | 33 29.3 N | 119 24.3 W | 24 | 1 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 16.873 | 33.519 | 16.873 | 24.408 | 0. | 2 |
| 10 | 16.788 | 33.551 | 16.786 | 24.453 | 0.35 | 1 |
| 20 | 16.310 | 33.633 | 16.307 | 24.627 | 0.69 | 1 |
| 30 | 14.791 | 33.655 | 14.787 | 24.982 | 1.01 | 1 |
| 40 | 13.644 | 33.650 | 13.638 | 25.219 | 1.30 | 1 |
| 50 | 12.827 | 33.652 | 12.820 | 25.385 | 1.57 | 1 |
| 60 | 11.781 | 33.641 | 11.773 | 25.577 | 1.82 | 1 |
| 70 | 11.281 | 33.663 | 11.272 | 25.686 | 2.06 | 1 |
| 80 | 11.136 | 33.727 | 11.126 | 25.762 | 2.29 | 1 |
| 90 | 10.673 | 33.756 | 10.662 | 25.867 | 2.51 | 1 |
| 100 | 10.383 | 33.758 | 10.371 | 25.919 | 2.72 | 1 |
| 125 | 9.573 | 33.824 | 9.559 | 26.108 | 3.22 | 1 |
| 150 | 9.067 | 33.964 | 9.051 | 26.299 | 3.68 | 1 |
| 175 | 8.890 | 34.037 | 8.871 | 26.385 | 4.11 | 1 |
| 200 | 8.557 | 34.094 | 8.536 | 26.482 | 4.52 | 1 |
| 225 | 8.296 | 34.113 | 8.273 | 26.537 | 4.91 | 1 |
| 250 | 8.110 | 34.181 | 8.085 | 26.618 | 5.28 | 1 |
| 300 | 7.622 | 34.208 | 7.592 | 26.712 | 5.99 | 1 |
| 400 | 6.752 | 34.246 | 6.715 | 26.864 | 7.31 | 1 |
| 500 | 5.902 | 34.302 | 5.858 | 27.019 | 8.48 | 4 |

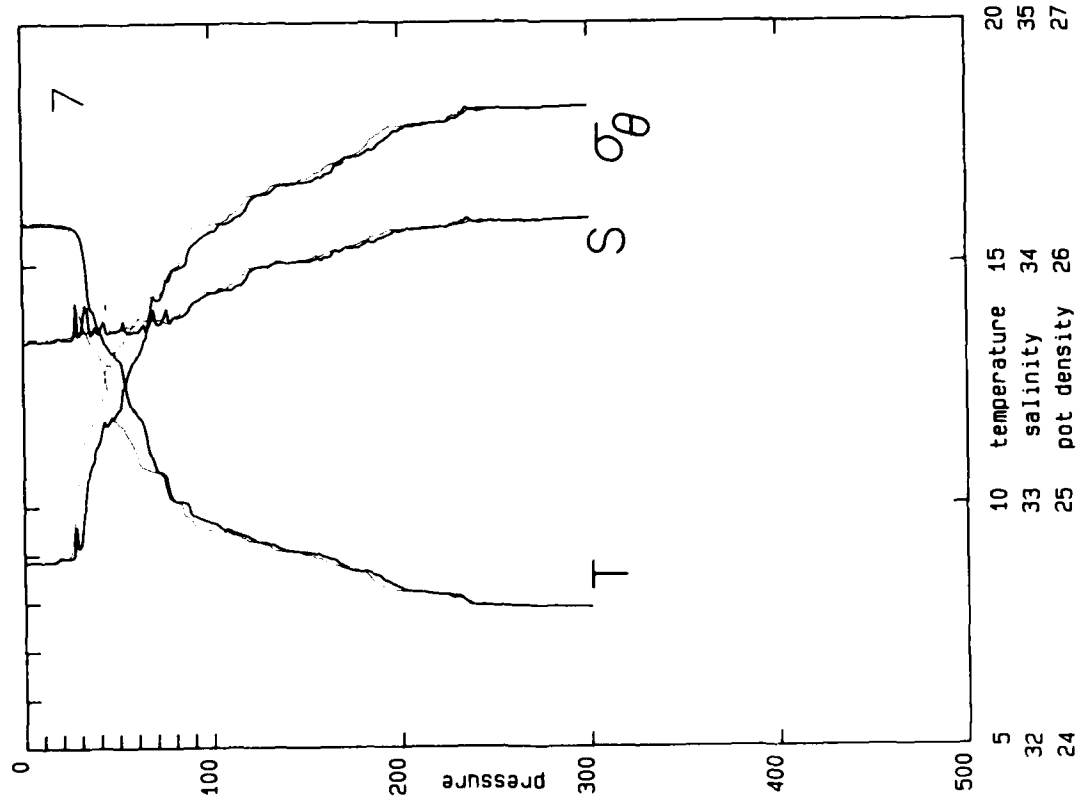
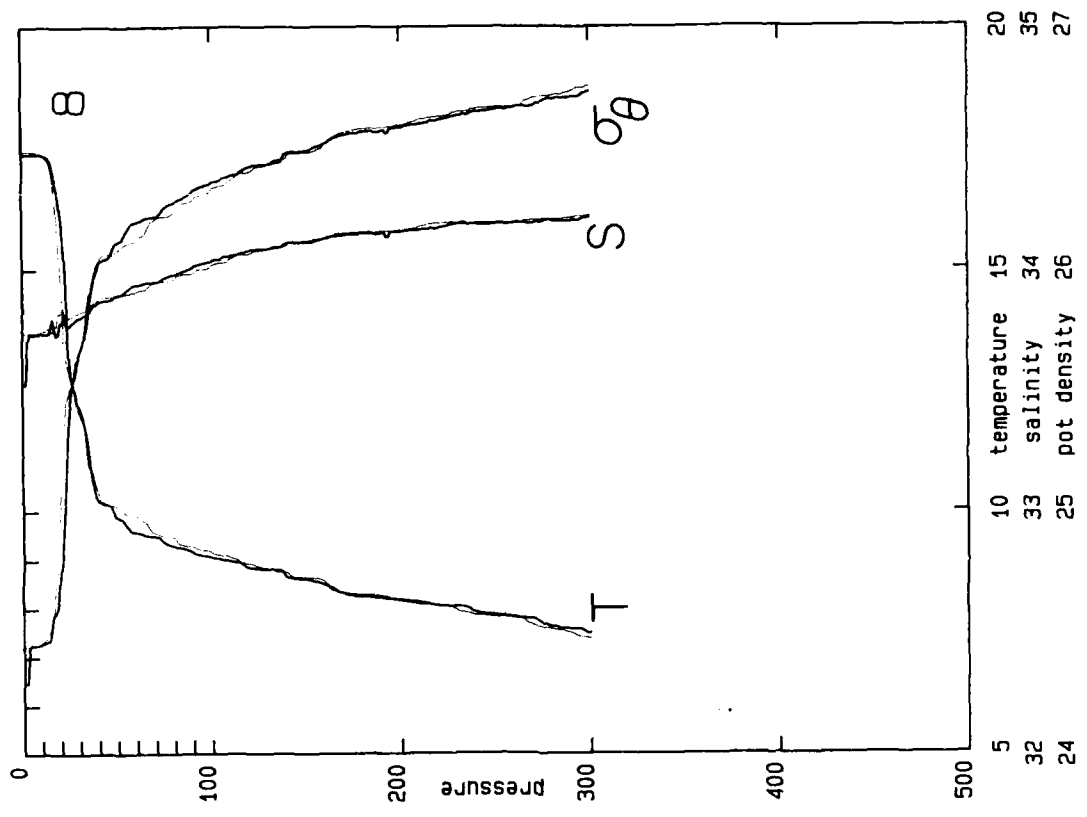


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|--------------|---------------------------|-----------|--|-------------------------------------|---|------|
| 7 | 184:10:10 | 33 11.6 N | 119 41.3 W | 26 | 5 | |
| depth (m) | temperature (degree C) | salinity | potential temperature (degree C) | sigma-theta (kg/m ³) | geopotential anomaly (m/s) ² | flag |
| 0 | 15.842 | 33.680 | 15.842 | 24.769 | 0. | 2 |
| 10 | 15.849 | 33.685 | 15.847 | 24.772 | 0.32 | 1 |
| 20 | 15.807 | 33.696 | 15.804 | 24.790 | 0.64 | 1 |
| 30 | 15.646 | 33.711 | 15.641 | 24.838 | 0.95 | 1 |
| 40 | 13.651 | 33.715 | 13.645 | 25.268 | 1.24 | 1 |
| 50 | 13.058 | 33.730 | 13.051 | 25.400 | 1.50 | 1 |
| 60 | 11.897 | 33.719 | 11.889 | 25.616 | 1.75 | 1 |
| 70 | 10.751 | 33.763 | 10.743 | 25.859 | 1.98 | 1 |
| 80 | 10.118 | 33.785 | 10.109 | 25.985 | 2.19 | 1 |
| 90 | 9.803 | 33.840 | 9.793 | 26.081 | 2.39 | 1 |
| 100 | 9.655 | 33.883 | 9.644 | 26.140 | 2.58 | 1 |
| 125 | 9.248 | 33.991 | 9.234 | 26.291 | 3.04 | 1 |
| 150 | 9.026 | 34.012 | 9.010 | 26.343 | 3.47 | 1 |
| 175 | 8.648 | 34.068 | 8.630 | 26.447 | 3.89 | 1 |
| 200 | 8.247 | 34.136 | 8.226 | 26.562 | 4.28 | 1 |
| 225 | 8.140 | 34.154 | 8.117 | 26.592 | 4.66 | 1 |
| 250 | 7.906 | 34.173 | 7.881 | 26.642 | 5.02 | 1 |
| 300 | 7.889 | 34.188 | 7.859 | 26.657 | 5.74 | 4 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|--------------|---------------------------|-----------|--|-------------------------------------|---|------|
| 8 | 184:12:18 | 32 53.8 N | 119 36.3 W | 16 | 3 | |
| depth (m) | temperature (degree C) | salinity | potential temperature (degree C) | sigma-theta (kg/m ³) | geopotential anomaly (m/s) ² | flag |
| 0 | 17.379 | 33.531 | 17.379 | 24.298 | 0. | 2 |
| 10 | 17.368 | 33.739 | 17.366 | 24.461 | 0.35 | 1 |
| 20 | 16.249 | 33.786 | 16.246 | 24.759 | 0.69 | 1 |
| 30 | 12.054 | 33.804 | 12.050 | 25.651 | 0.96 | 1 |
| 40 | 10.208 | 33.868 | 10.203 | 26.034 | 1.17 | 1 |
| 50 | 9.876 | 33.898 | 9.870 | 26.114 | 1.37 | 1 |
| 60 | 9.564 | 33.937 | 9.557 | 26.196 | 1.55 | 1 |
| 70 | 9.482 | 33.951 | 9.474 | 26.221 | 1.74 | 1 |
| 80 | 9.285 | 33.981 | 9.276 | 26.276 | 1.92 | 1 |
| 90 | 9.142 | 34.013 | 9.132 | 26.325 | 2.09 | 1 |
| 100 | 9.038 | 34.039 | 9.027 | 26.362 | 2.26 | 1 |
| 125 | 8.809 | 34.084 | 8.796 | 26.433 | 2.67 | 1 |
| 150 | 8.593 | 34.114 | 8.577 | 26.491 | 3.07 | 1 |
| 175 | 8.277 | 34.144 | 8.259 | 26.563 | 3.46 | 1 |
| 200 | 8.168 | 34.156 | 8.148 | 26.589 | 3.83 | 1 |
| 225 | 8.029 | 34.178 | 8.006 | 26.628 | 4.20 | 1 |
| 250 | 7.844 | 34.184 | 7.819 | 26.660 | 4.56 | 1 |
| 300 | 7.457 | 34.209 | 7.428 | 26.736 | 5.26 | 1 |

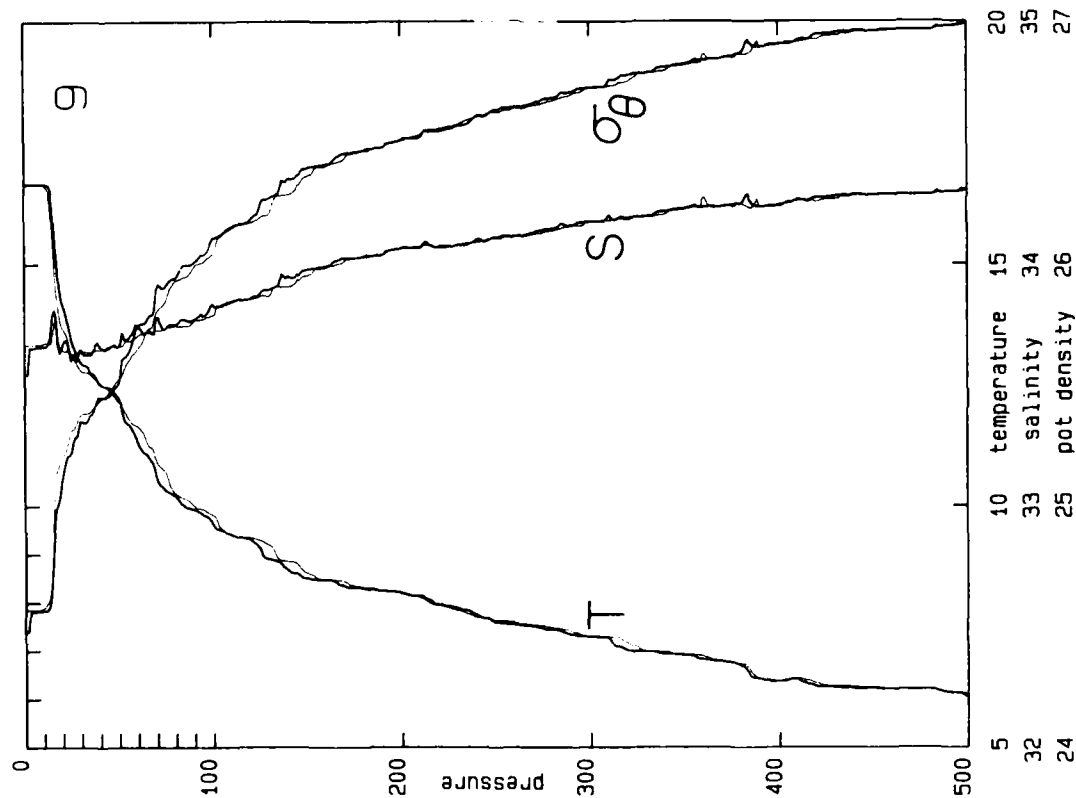
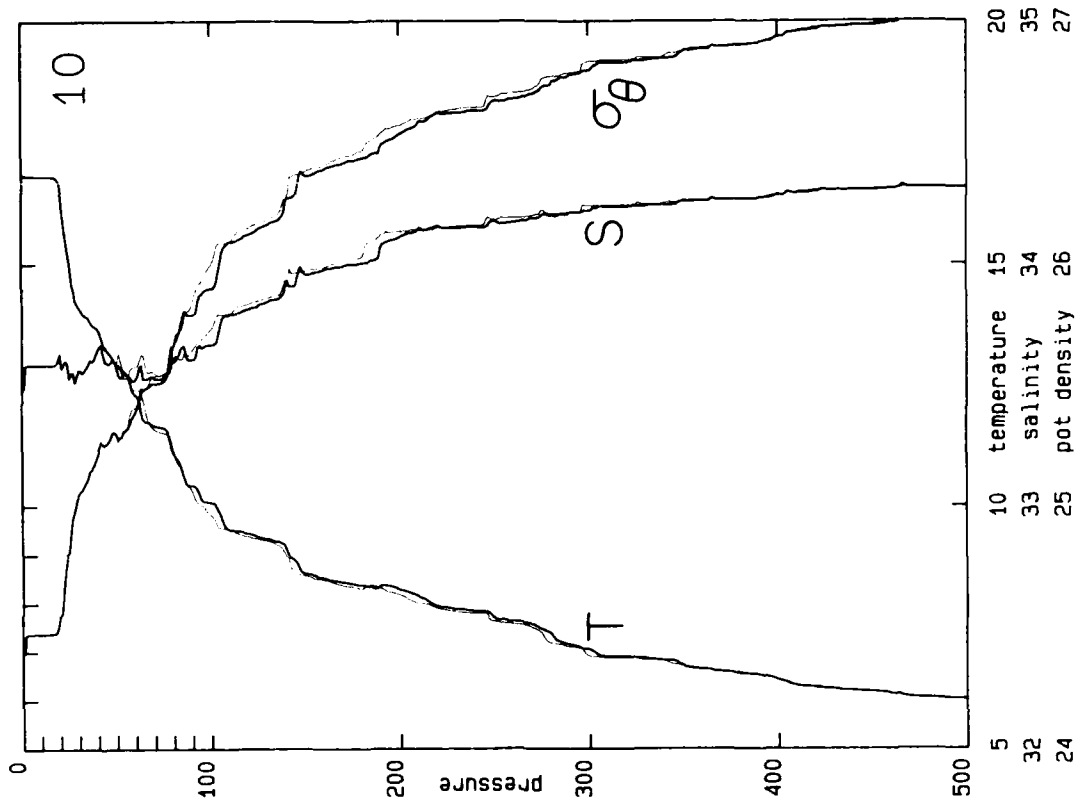


RV NEW HORIZON

FRONTS 1

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 9 | 184:14:38 | 32 37.1 N | 119 34.1 W | 21 | 3 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 16.656 | 33.547 | 16.656 | 24.481 | 0. | 2 |
| 10 | 16.656 | 33.660 | 16.654 | 24.568 | 0.34 | 1 |
| 20 | 14.195 | 33.655 | 14.192 | 25.108 | 0.65 | 1 |
| 30 | 12.973 | 33.648 | 12.969 | 25.352 | 0.93 | 1 |
| 40 | 12.532 | 33.662 | 12.527 | 25.450 | 1.19 | 1 |
| 50 | 12.195 | 33.658 | 12.188 | 25.512 | 1.44 | 1 |
| 60 | 11.304 | 33.745 | 11.297 | 25.745 | 1.68 | 1 |
| 70 | 10.603 | 33.745 | 10.595 | 25.870 | 1.90 | 1 |
| 80 | 10.197 | 33.752 | 10.188 | 25.946 | 2.11 | 1 |
| 90 | 9.920 | 33.774 | 9.910 | 26.010 | 2.31 | 1 |
| 100 | 9.579 | 33.826 | 9.568 | 26.108 | 2.51 | 1 |
| 125 | 9.015 | 33.873 | 9.002 | 26.236 | 2.98 | 1 |
| 150 | 8.488 | 33.976 | 8.472 | 26.399 | 3.41 | 1 |
| 175 | 8.299 | 34.025 | 8.281 | 26.466 | 3.82 | 1 |
| 200 | 8.176 | 34.068 | 8.156 | 26.519 | 4.22 | 1 |
| 225 | 7.902 | 34.071 | 7.879 | 26.562 | 4.60 | 1 |
| 250 | 7.581 | 34.107 | 7.557 | 26.637 | 4.97 | 1 |
| 300 | 7.287 | 34.174 | 7.258 | 26.732 | 5.67 | 1 |
| 400 | 6.384 | 34.245 | 6.348 | 26.911 | 6.95 | 1 |
| 500 | 6.035 | 34.307 | 5.991 | 27.006 | 8.11 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 10 | 184:17: 5 | 32 20.5 N | 119 30.1 W | 22 | 36 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 16.830 | 33.490 | 16.830 | 24.396 | 0. | 2 |
| 10 | 16.800 | 33.586 | 16.798 | 24.478 | 0.35 | 1 |
| 20 | 16.635 | 33.635 | 16.632 | 24.554 | 0.69 | 1 |
| 30 | 14.118 | 33.564 | 14.114 | 25.054 | 1.01 | 1 |
| 40 | 13.673 | 33.651 | 13.667 | 25.214 | 1.29 | 1 |
| 50 | 12.932 | 33.572 | 12.925 | 25.302 | 1.56 | 1 |
| 60 | 12.302 | 33.531 | 12.294 | 25.393 | 1.83 | 1 |
| 70 | 11.666 | 33.527 | 11.657 | 25.510 | 2.08 | 1 |
| 80 | 11.084 | 33.591 | 11.074 | 25.666 | 2.33 | 1 |
| 90 | 10.433 | 33.609 | 10.422 | 25.794 | 2.55 | 1 |
| 100 | 10.075 | 33.669 | 10.064 | 25.902 | 2.77 | 1 |
| 125 | 9.361 | 33.832 | 9.347 | 26.148 | 3.26 | 1 |
| 150 | 8.607 | 33.952 | 8.591 | 26.362 | 3.71 | 1 |
| 175 | 8.392 | 33.995 | 8.374 | 26.429 | 4.12 | 1 |
| 200 | 8.262 | 34.114 | 8.241 | 26.542 | 4.52 | 1 |
| 225 | 7.897 | 34.146 | 7.874 | 26.622 | 4.89 | 1 |
| 250 | 7.675 | 34.173 | 7.650 | 26.676 | 5.26 | 1 |
| 300 | 7.021 | 34.224 | 6.993 | 26.809 | 5.94 | 1 |
| 400 | 6.391 | 34.281 | 6.355 | 26.939 | 7.17 | 1 |
| 500 | 6.015 | 34.315 | 5.971 | 27.015 | 8.30 | 1 |

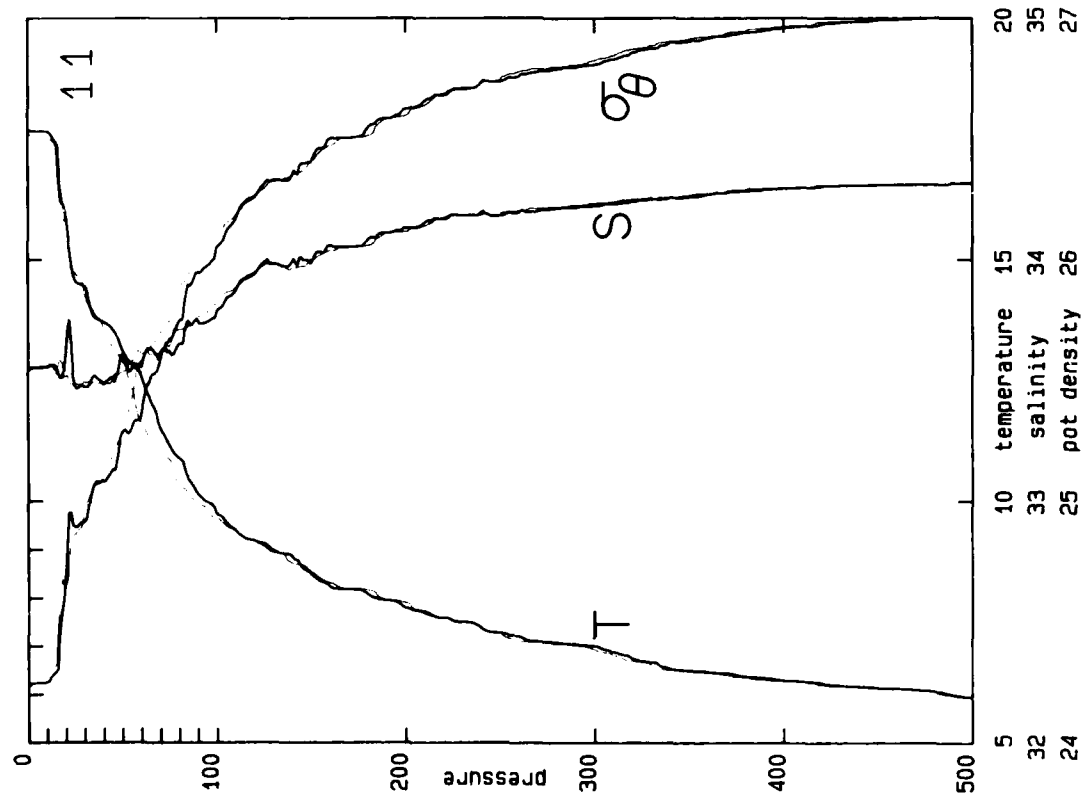
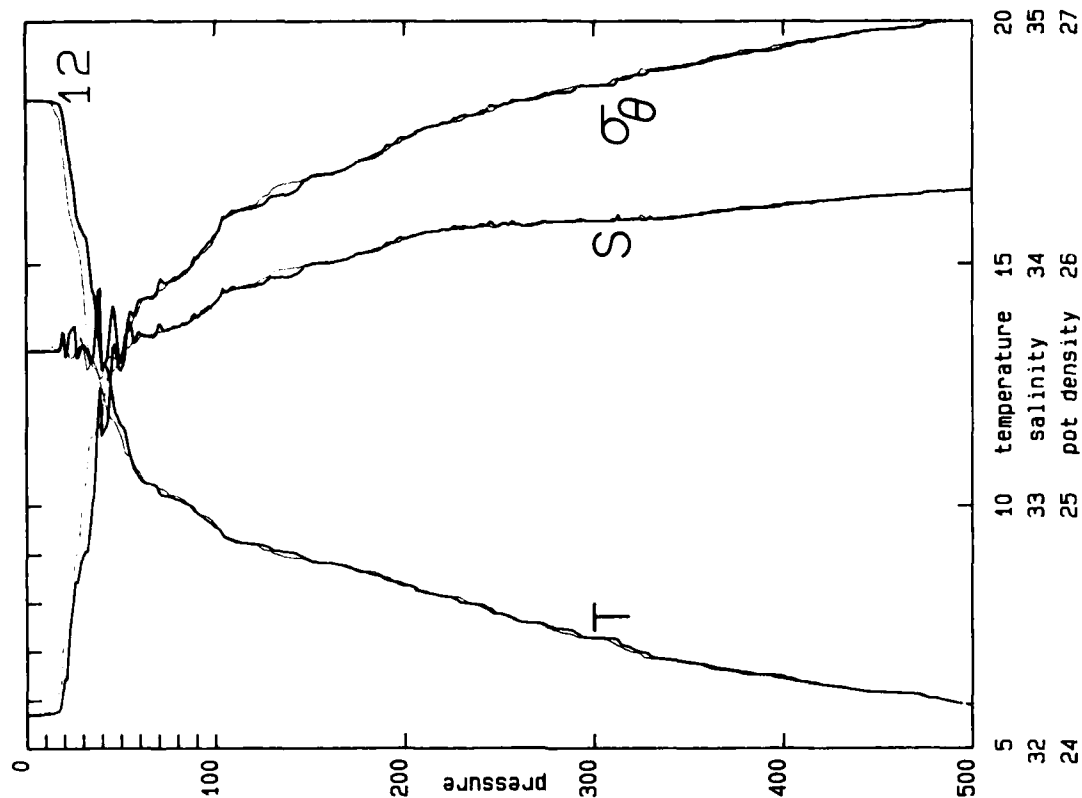


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|----------|--------------------------|----------------------|----------------------------|------|
| 11 | 184:21: 5 | 32 5.0 N | 119 27.5 W | 20 | 3 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 17.675 | 33.547 | 17.675 | 24.240 | 0. | 2 |
| 10 | 17.647 | 33.555 | 17.645 | 24.253 | 0.37 | 1 |
| 20 | 15.934 | 33.616 | 15.931 | 24.700 | 0.72 | 1 |
| 30 | 14.447 | 33.473 | 14.443 | 24.915 | 1.03 | 1 |
| 40 | 13.697 | 33.487 | 13.691 | 25.082 | 1.32 | 1 |
| 50 | 13.101 | 33.603 | 13.094 | 25.293 | 1.61 | 1 |
| 60 | 12.580 | 33.551 | 12.572 | 25.355 | 1.87 | 1 |
| 70 | 11.493 | 33.615 | 11.484 | 25.610 | 2.12 | 1 |
| 80 | 10.883 | 33.652 | 10.873 | 25.749 | 2.36 | 1 |
| 90 | 10.134 | 33.737 | 10.124 | 25.945 | 2.57 | 1 |
| 100 | 9.727 | 33.792 | 9.716 | 26.057 | 2.77 | 1 |
| 125 | 9.065 | 33.991 | 9.051 | 26.320 | 3.23 | 1 |
| 150 | 8.466 | 34.005 | 8.450 | 26.425 | 3.66 | 1 |
| 175 | 8.153 | 34.056 | 8.135 | 26.513 | 4.05 | 1 |
| 200 | 7.771 | 34.131 | 7.751 | 26.628 | 4.42 | 1 |
| 225 | 7.507 | 34.185 | 7.485 | 26.709 | 4.78 | 1 |
| 250 | 7.265 | 34.182 | 7.241 | 26.741 | 5.12 | 1 |
| 300 | 6.991 | 34.225 | 6.963 | 26.814 | 5.77 | 1 |
| 400 | 6.283 | 34.294 | 6.247 | 26.963 | 6.97 | 1 |
| 500 | 5.908 | 34.320 | 5.864 | 27.033 | 8.10 | 4 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 12 | 184:23:45 | 31 43.8 N | 119 24.4 W | 24 | 2 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 18.374 | 33.640 | 18.374 | 24.140 | 0. | 2 |
| 10 | 18.358 | 33.641 | 18.356 | 24.145 | 0.38 | 1 |
| 20 | 17.996 | 33.713 | 17.993 | 24.289 | 0.76 | 1 |
| 30 | 15.661 | 33.667 | 15.656 | 24.800 | 1.09 | 1 |
| 40 | 13.000 | 33.616 | 12.995 | 25.323 | 1.38 | 1 |
| 50 | 11.661 | 33.596 | 11.655 | 25.564 | 1.63 | 1 |
| 60 | 10.566 | 33.717 | 10.559 | 25.855 | 1.86 | 1 |
| 70 | 10.269 | 33.757 | 10.261 | 25.937 | 2.07 | 1 |
| 80 | 10.125 | 33.740 | 10.116 | 25.949 | 2.28 | 1 |
| 90 | 9.852 | 33.776 | 9.842 | 26.023 | 2.48 | 1 |
| 100 | 9.548 | 33.844 | 9.537 | 26.127 | 2.68 | 1 |
| 125 | 9.178 | 33.921 | 9.164 | 26.247 | 3.14 | 1 |
| 150 | 8.855 | 34.000 | 8.839 | 26.361 | 3.57 | 1 |
| 175 | 8.641 | 34.042 | 8.623 | 26.427 | 3.99 | 1 |
| 200 | 8.350 | 34.104 | 8.329 | 26.521 | 4.39 | 1 |
| 225 | 8.077 | 34.155 | 8.054 | 26.602 | 4.77 | 1 |
| 250 | 7.764 | 34.164 | 7.739 | 26.656 | 5.13 | 1 |
| 300 | 7.274 | 34.176 | 7.245 | 26.736 | 5.83 | 1 |
| 400 | 6.447 | 34.240 | 6.411 | 26.899 | 7.11 | 1 |
| 500 | 5.871 | 34.306 | 5.828 | 27.026 | 8.27 | 4 |

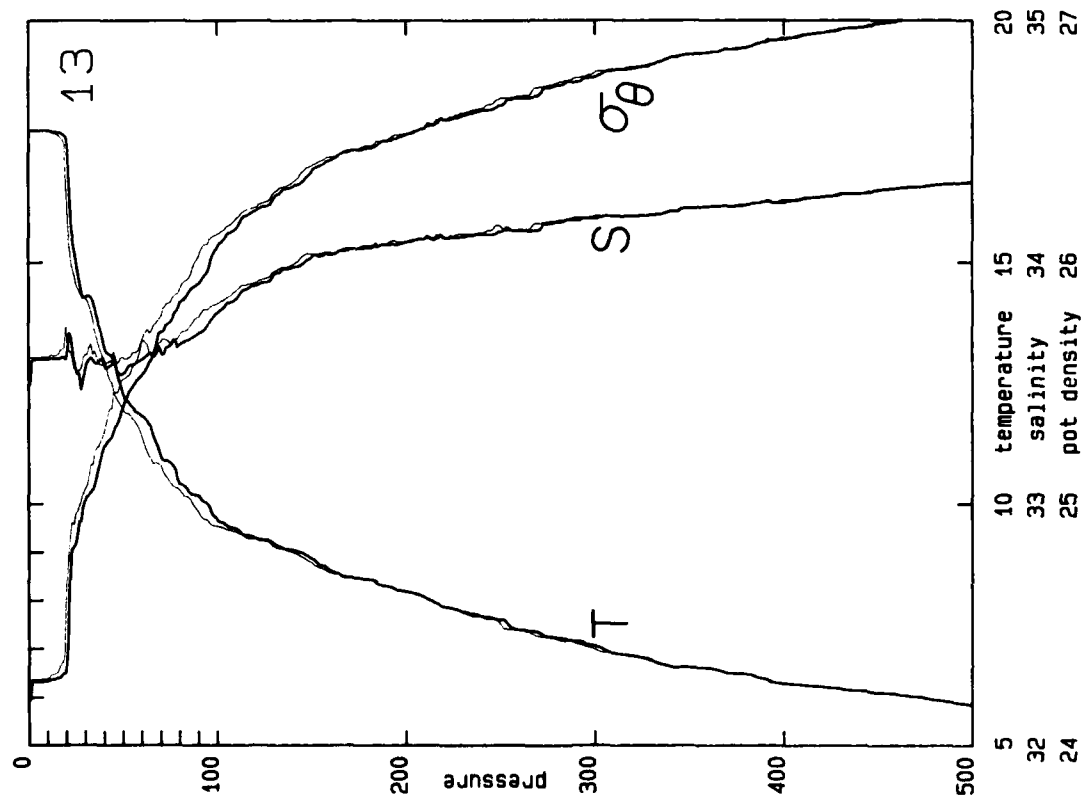
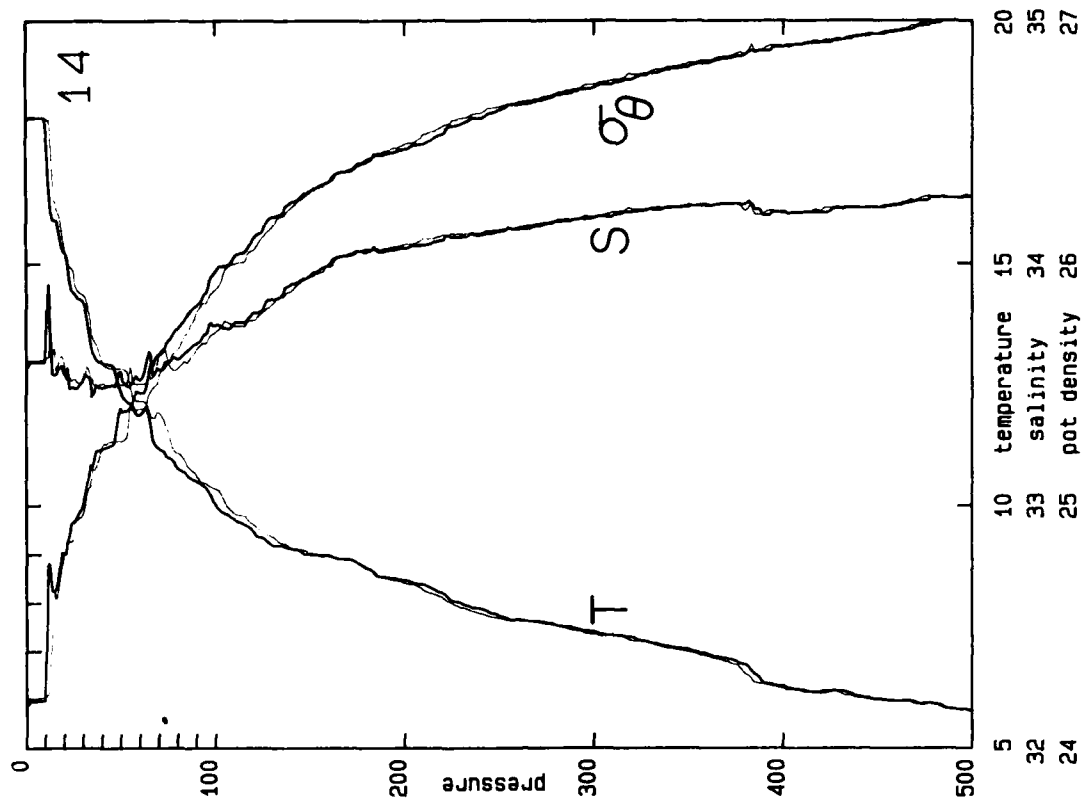


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 13 | 185: 1:57 | 31 27.4 N | 119 20.2 W | 17 | 36 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 17.723 | 33.497 | 17.723 | 24.190 | 0. | 2 |
| 10 | 17.726 | 33.600 | 17.724 | 24.268 | 0.37 | 1 |
| 20 | 17.572 | 33.595 | 17.569 | 24.302 | 0.73 | 1 |
| 30 | 14.270 | 33.556 | 14.266 | 25.016 | 1.05 | 1 |
| 40 | 13.263 | 33.577 | 13.257 | 25.240 | 1.33 | 1 |
| 50 | 12.225 | 33.535 | 12.218 | 25.411 | 1.60 | 1 |
| 60 | 11.816 | 33.598 | 11.808 | 25.537 | 1.85 | 1 |
| 70 | 10.967 | 33.625 | 10.959 | 25.713 | 2.09 | 1 |
| 80 | 10.414 | 33.656 | 10.405 | 25.834 | 2.32 | 1 |
| 90 | 10.160 | 33.706 | 10.150 | 25.917 | 2.53 | 1 |
| 100 | 9.644 | 33.789 | 9.633 | 26.068 | 2.74 | 1 |
| 125 | 9.246 | 33.917 | 9.232 | 26.233 | 3.20 | 1 |
| 150 | 8.852 | 34.029 | 8.836 | 26.384 | 3.64 | 1 |
| 175 | 8.451 | 34.056 | 8.433 | 26.468 | 4.05 | 1 |
| 200 | 8.166 | 34.085 | 8.146 | 26.534 | 4.44 | 1 |
| 225 | 7.809 | 34.103 | 7.787 | 26.601 | 4.81 | 1 |
| 250 | 7.593 | 34.130 | 7.569 | 26.654 | 5.18 | 1 |
| 300 | 7.029 | 34.183 | 7.001 | 26.775 | 5.86 | 1 |
| 400 | 6.271 | 34.252 | 6.235 | 26.932 | 7.11 | 1 |
| 500 | 5.818 | 34.330 | 5.775 | 27.052 | 8.24 | 4 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|----------|--------------------------|----------------------|----------------------------|------|
| 14 | 185: 4: 9 | 31 9.9 N | 119 17.4 W | 18 | 2 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 17.994 | 33.576 | 17.994 | 24.184 | 0. | 2 |
| 10 | 18.002 | 33.594 | 18.000 | 24.197 | 0.37 | 1 |
| 20 | 15.226 | 33.546 | 15.223 | 24.803 | 0.70 | 1 |
| 30 | 14.215 | 33.522 | 14.211 | 25.002 | 1.01 | 1 |
| 40 | 12.945 | 33.489 | 12.940 | 25.235 | 1.29 | 1 |
| 50 | 12.330 | 33.550 | 12.323 | 25.402 | 1.56 | 1 |
| 60 | 11.876 | 33.521 | 11.868 | 25.466 | 1.81 | 1 |
| 70 | 11.171 | 33.567 | 11.162 | 25.631 | 2.06 | 1 |
| 80 | 10.755 | 33.605 | 10.745 | 25.735 | 2.29 | 1 |
| 90 | 10.497 | 33.672 | 10.486 | 25.832 | 2.52 | 1 |
| 100 | 10.006 | 33.740 | 9.995 | 25.969 | 2.73 | 1 |
| 125 | 9.320 | 33.819 | 9.306 | 26.145 | 3.22 | 1 |
| 150 | 8.998 | 33.956 | 8.982 | 26.304 | 3.68 | 1 |
| 175 | 8.804 | 34.052 | 8.785 | 26.410 | 4.10 | 1 |
| 200 | 8.450 | 34.062 | 8.429 | 26.473 | 4.51 | 1 |
| 225 | 8.023 | 34.106 | 8.000 | 26.572 | 4.90 | 1 |
| 250 | 7.708 | 34.130 | 7.683 | 26.637 | 5.27 | 1 |
| 300 | 7.366 | 34.192 | 7.337 | 26.735 | 5.97 | 1 |
| 400 | 6.241 | 34.206 | 6.205 | 26.899 | 7.25 | 1 |
| 500 | 5.745 | 34.273 | 5.702 | 27.016 | 8.42 | 4 |

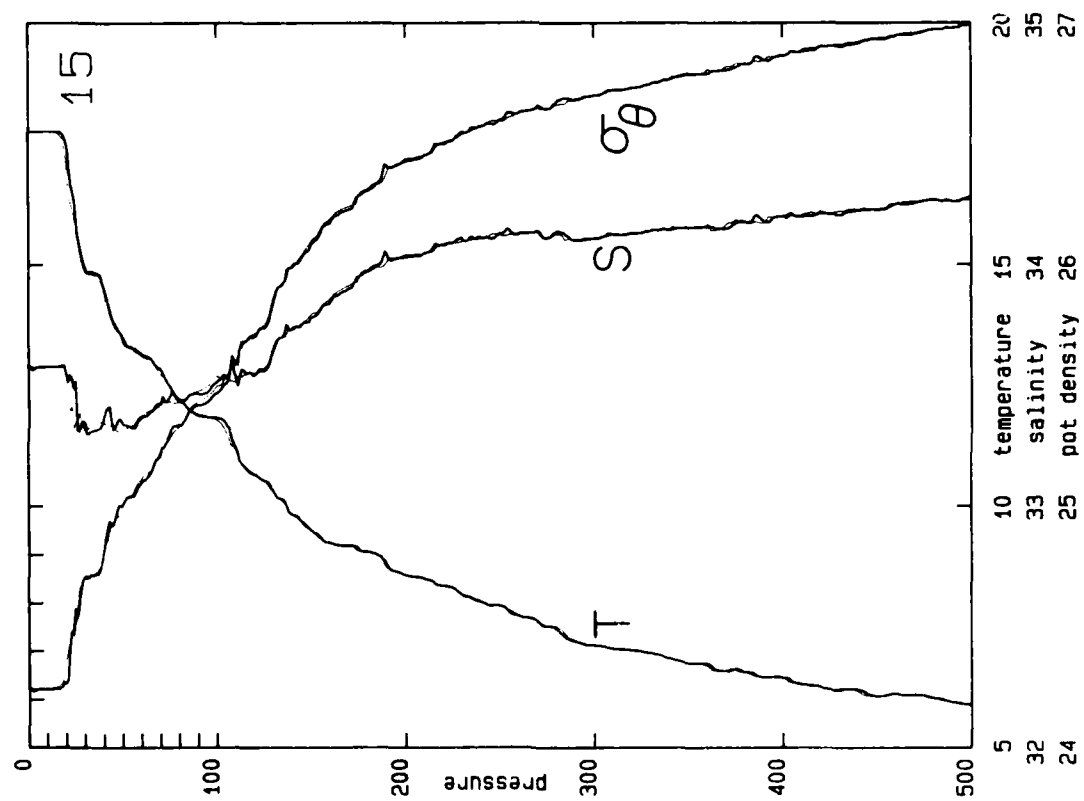
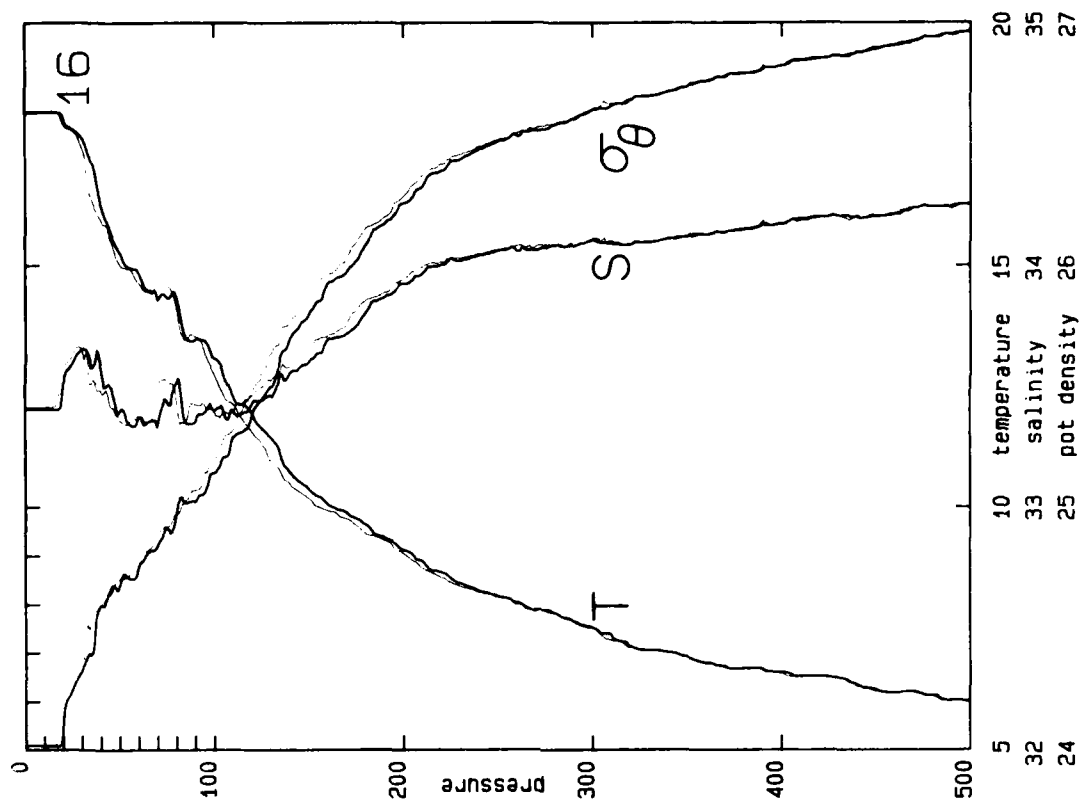


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 15 | 185: 6:44 | 30 52.3 N | 119 13.4 W | 11 | 1 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 17.758 | 33.579 | 17.758 | 24.244 | 0. | 2 |
| 10 | 17.762 | 33.578 | 17.760 | 24.243 | 0.37 | 1 |
| 20 | 17.562 | 33.543 | 17.559 | 24.264 | 0.74 | 1 |
| 30 | 14.917 | 33.344 | 14.913 | 24.715 | 1.08 | 1 |
| 40 | 14.520 | 33.377 | 14.514 | 24.826 | 1.40 | 1 |
| 50 | 13.494 | 33.335 | 13.487 | 25.006 | 1.71 | 1 |
| 60 | 13.139 | 33.372 | 13.131 | 25.106 | 2.00 | 1 |
| 70 | 12.816 | 33.434 | 12.807 | 25.219 | 2.28 | 1 |
| 80 | 12.198 | 33.430 | 12.188 | 25.335 | 2.55 | 1 |
| 90 | 11.882 | 33.461 | 11.870 | 25.419 | 2.81 | 1 |
| 100 | 11.826 | 33.519 | 11.813 | 25.474 | 3.07 | 1 |
| 125 | 10.522 | 33.562 | 10.507 | 25.743 | 3.67 | 1 |
| 150 | 9.470 | 33.780 | 9.453 | 26.090 | 4.19 | 1 |
| 175 | 9.066 | 33.954 | 9.047 | 26.292 | 4.65 | 1 |
| 200 | 8.550 | 34.032 | 8.529 | 26.434 | 5.07 | 1 |
| 225 | 8.285 | 34.095 | 8.262 | 26.524 | 5.47 | 1 |
| 250 | 7.918 | 34.130 | 7.893 | 26.607 | 5.85 | 1 |
| 300 | 7.105 | 34.108 | 7.077 | 26.706 | 6.56 | 1 |
| 400 | 6.421 | 34.202 | 6.385 | 26.873 | 7.88 | 1 |
| 500 | 5.837 | 34.278 | 5.794 | 27.008 | 9.06 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 16 | 185:10: 2 | 30 30.3 N | 119 28.9 W | 14 | 2 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 18.134 | 33.406 | 18.134 | 24.020 | 0. | 2 |
| 10 | 18.145 | 33.405 | 18.143 | 24.017 | 0.39 | 1 |
| 20 | 18.061 | 33.469 | 18.058 | 24.087 | 0.78 | 1 |
| 30 | 17.624 | 33.655 | 17.619 | 24.336 | 1.15 | 1 |
| 40 | 16.222 | 33.570 | 16.216 | 24.600 | 1.50 | 1 |
| 50 | 15.260 | 33.396 | 15.252 | 24.681 | 1.83 | 1 |
| 60 | 14.842 | 33.383 | 14.833 | 24.762 | 2.16 | 1 |
| 70 | 14.258 | 33.348 | 14.248 | 24.860 | 2.47 | 1 |
| 80 | 14.304 | 33.523 | 14.292 | 24.985 | 2.78 | 1 |
| 90 | 13.487 | 33.361 | 13.474 | 25.029 | 3.08 | 1 |
| 100 | 13.067 | 33.395 | 13.053 | 25.140 | 3.37 | 1 |
| 125 | 11.629 | 33.444 | 11.613 | 25.453 | 4.05 | 1 |
| 150 | 10.312 | 33.610 | 10.294 | 25.817 | 4.64 | 1 |
| 175 | 9.752 | 33.758 | 9.732 | 26.027 | 5.17 | 1 |
| 200 | 9.110 | 33.923 | 9.088 | 26.261 | 5.64 | 1 |
| 225 | 8.506 | 34.024 | 8.482 | 26.435 | 6.07 | 1 |
| 250 | 8.149 | 34.061 | 8.123 | 26.518 | 6.47 | 1 |
| 300 | 7.494 | 34.107 | 7.465 | 26.651 | 7.22 | 1 |
| 400 | 6.592 | 34.178 | 6.555 | 26.831 | 8.58 | 1 |
| 500 | 5.971 | 34.251 | 5.927 | 26.970 | 9.80 | 4 |

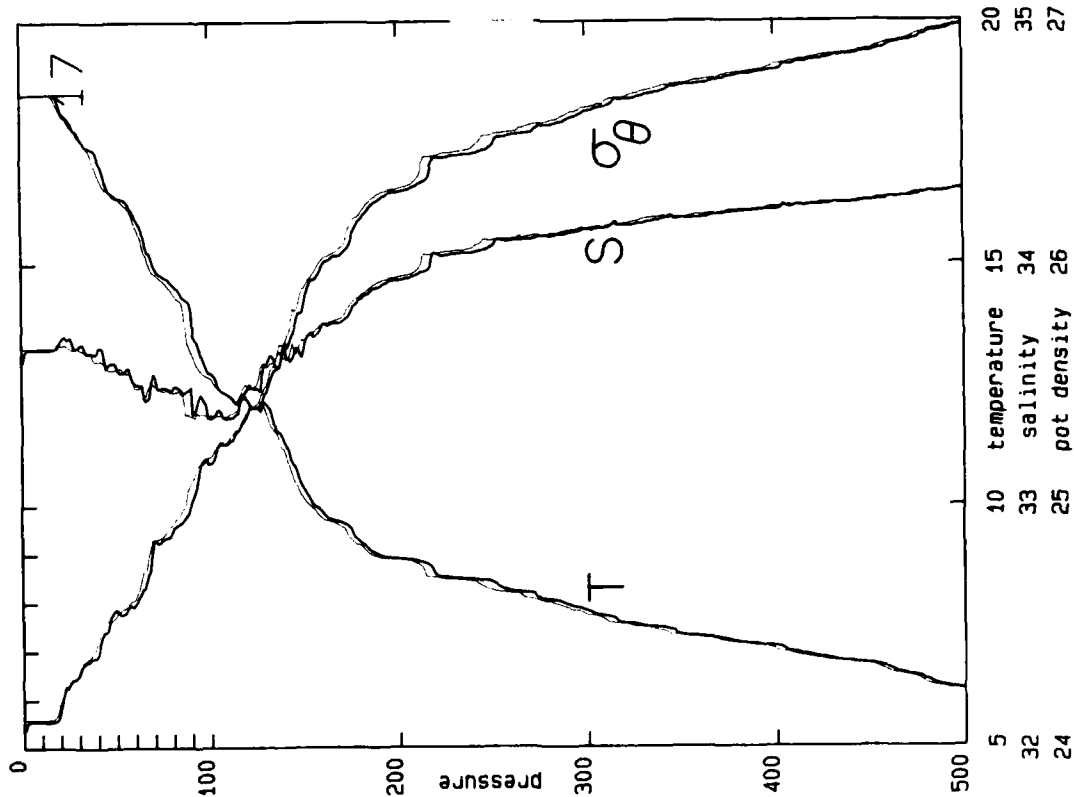
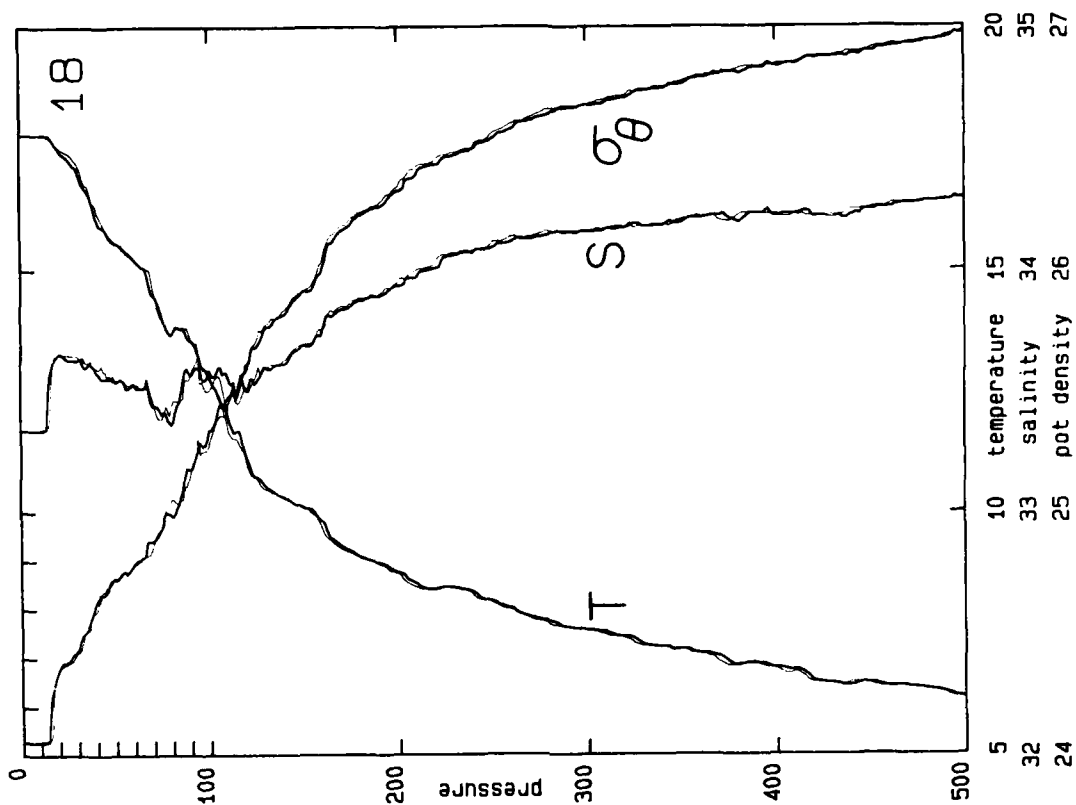


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 17 | 185:13:12 | 30 42.5 N | 119 50.7 W | 16 | 2 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 18.492 | 33.600 | 18.492 | 24.080 | 0. | 2 |
| 10 | 18.520 | 33.648 | 18.518 | 24.110 | 0.38 | 1 |
| 20 | 18.364 | 33.676 | 18.361 | 24.171 | 0.76 | 1 |
| 30 | 17.733 | 33.657 | 17.728 | 24.311 | 1.13 | 1 |
| 40 | 17.303 | 33.629 | 17.296 | 24.393 | 1.49 | 1 |
| 50 | 16.382 | 33.583 | 16.374 | 24.573 | 1.84 | 1 |
| 60 | 16.013 | 33.507 | 16.004 | 24.599 | 2.18 | 1 |
| 70 | 14.945 | 33.547 | 14.935 | 24.867 | 2.50 | 1 |
| 80 | 14.568 | 33.486 | 14.556 | 24.901 | 2.81 | 1 |
| 90 | 13.860 | 33.433 | 13.847 | 25.009 | 3.12 | 1 |
| 100 | 12.740 | 33.366 | 12.727 | 25.182 | 3.40 | 1 |
| 125 | 12.023 | 33.485 | 12.007 | 25.412 | 4.08 | 1 |
| 150 | 10.308 | 33.671 | 10.290 | 25.865 | 4.68 | 1 |
| 175 | 9.451 | 33.820 | 9.432 | 26.125 | 5.19 | 1 |
| 200 | 8.897 | 33.934 | 8.876 | 26.303 | 5.64 | 1 |
| 225 | 8.508 | 34.034 | 8.484 | 26.442 | 6.07 | 1 |
| 250 | 8.370 | 34.082 | 8.344 | 26.501 | 6.47 | 1 |
| 300 | 7.791 | 34.139 | 7.761 | 26.633 | 7.23 | 1 |
| 400 | 7.048 | 34.222 | 7.010 | 26.805 | 8.60 | 1 |
| 500 | 6.144 | 34.306 | 6.100 | 26.992 | 9.83 | 4 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|----------|--------------------------|----------------------|----------------------------|------|
| 18 | 185:16: 8 | 31 1.5 N | 119 55.9 W | 19 | 1 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 17.783 | 33.339 | 17.783 | 24.054 | 0. | 2 |
| 10 | 17.784 | 33.339 | 17.782 | 24.054 | 0.39 | 1 |
| 20 | 17.510 | 33.656 | 17.507 | 24.363 | 0.76 | 1 |
| 30 | 17.086 | 33.629 | 17.081 | 24.444 | 1.12 | 1 |
| 40 | 16.089 | 33.581 | 16.083 | 24.638 | 1.46 | 1 |
| 50 | 15.556 | 33.539 | 15.548 | 24.726 | 1.79 | 1 |
| 60 | 15.210 | 33.526 | 15.201 | 24.793 | 2.11 | 1 |
| 70 | 14.468 | 33.435 | 14.458 | 24.883 | 2.42 | 1 |
| 80 | 13.677 | 33.360 | 13.666 | 24.989 | 2.72 | 1 |
| 90 | 13.521 | 33.567 | 13.508 | 25.182 | 3.01 | 1 |
| 100 | 12.756 | 33.581 | 12.743 | 25.345 | 3.29 | 1 |
| 125 | 10.714 | 33.547 | 10.699 | 25.698 | 3.91 | 1 |
| 150 | 10.084 | 33.688 | 10.067 | 25.917 | 4.46 | 1 |
| 175 | 9.177 | 33.860 | 9.158 | 26.201 | 4.96 | 1 |
| 200 | 8.742 | 33.934 | 8.721 | 26.328 | 5.41 | 1 |
| 225 | 8.457 | 34.056 | 8.434 | 26.467 | 5.82 | 1 |
| 250 | 8.135 | 34.095 | 8.109 | 26.547 | 6.22 | 1 |
| 300 | 7.556 | 34.155 | 7.527 | 26.679 | 6.95 | 1 |
| 400 | 6.782 | 34.222 | 6.745 | 26.841 | 8.28 | 1 |
| 500 | 6.127 | 34.295 | 6.083 | 26.985 | 9.49 | 1 |

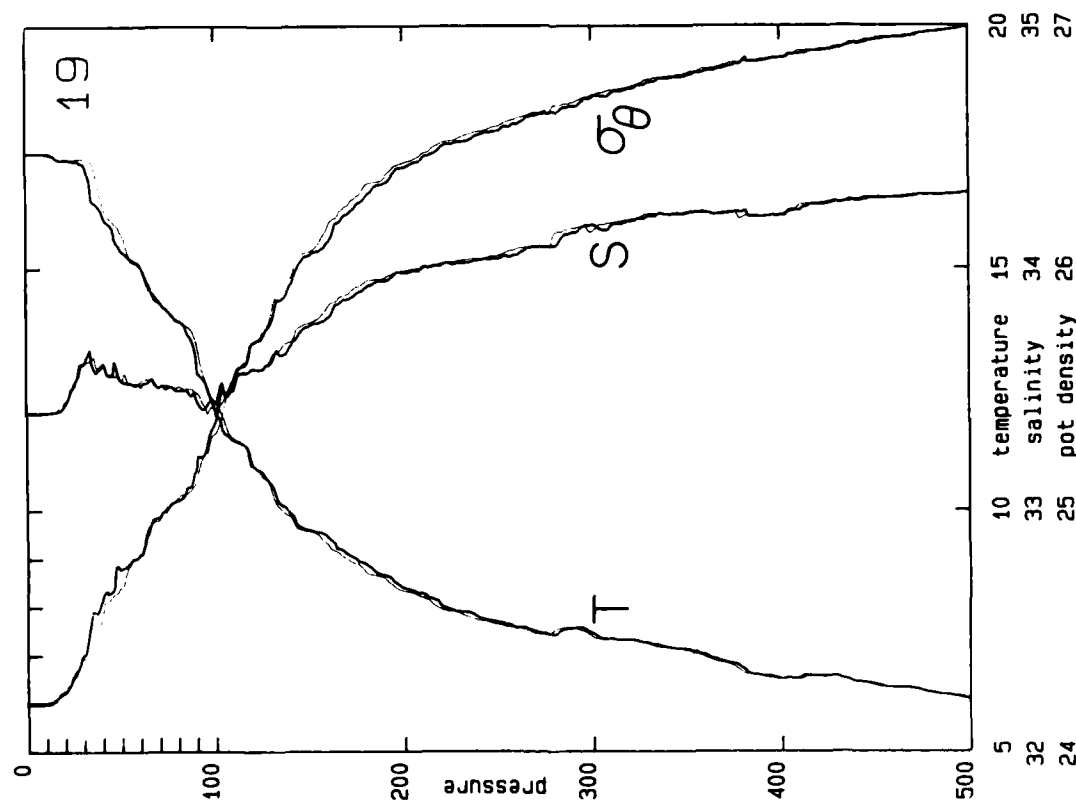
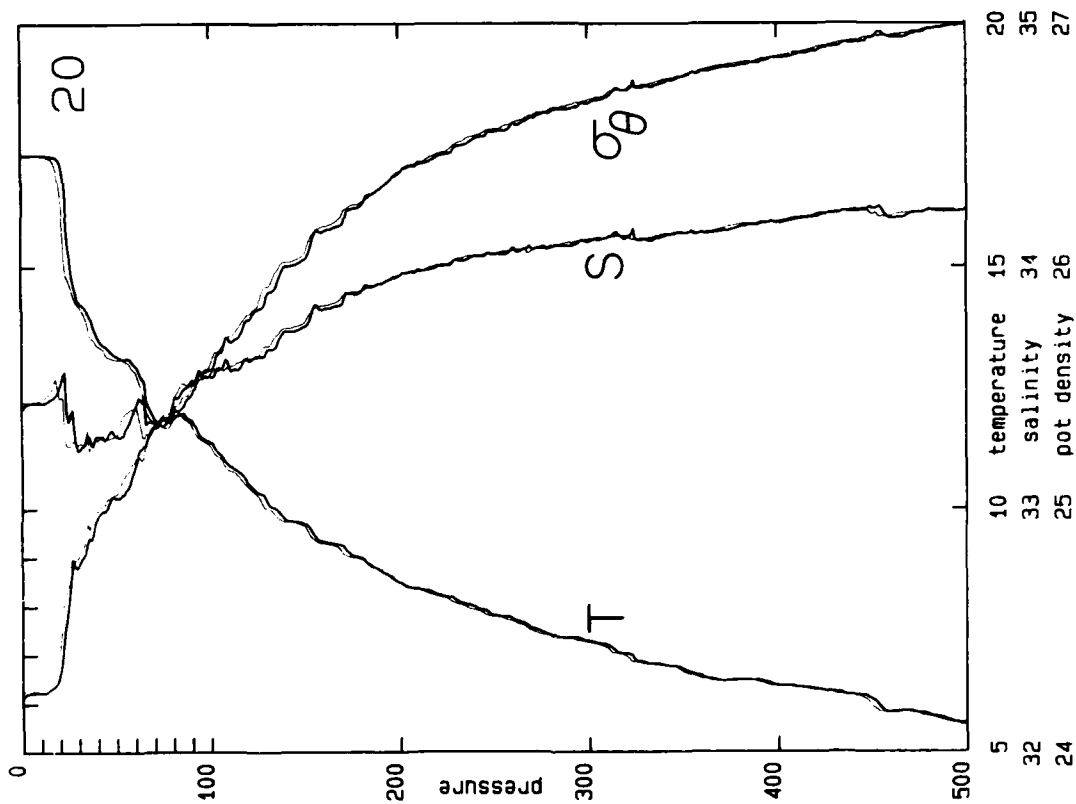


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 19 | 185:23:41 | 31 18.5 N | 119 58.0 W | 16 | 1 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 17.383 | 33.403 | 17.383 | 24.199 | 0. | 2 |
| 10 | 17.380 | 33.403 | 17.378 | 24.200 | 0.37 | 1 |
| 20 | 17.251 | 33.429 | 17.248 | 24.251 | 0.75 | 1 |
| 30 | 17.167 | 33.605 | 17.162 | 24.406 | 1.11 | 1 |
| 40 | 16.143 | 33.605 | 16.137 | 24.645 | 1.45 | 1 |
| 50 | 15.368 | 33.536 | 15.360 | 24.765 | 1.78 | 1 |
| 60 | 15.051 | 33.524 | 15.042 | 24.826 | 2.09 | 1 |
| 70 | 14.301 | 33.508 | 14.291 | 24.974 | 2.40 | 1 |
| 80 | 13.917 | 33.494 | 13.906 | 25.044 | 2.70 | 1 |
| 90 | 13.067 | 33.443 | 13.055 | 25.177 | 2.99 | 1 |
| 100 | 12.026 | 33.440 | 12.013 | 25.376 | 3.26 | 1 |
| 125 | 10.747 | 33.578 | 10.732 | 25.716 | 3.87 | 1 |
| 150 | 9.581 | 33.765 | 9.564 | 26.061 | 4.40 | 1 |
| 175 | 8.933 | 33.900 | 8.914 | 26.271 | 4.87 | 1 |
| 200 | 8.361 | 33.979 | 8.340 | 26.421 | 5.30 | 1 |
| 225 | 7.908 | 34.013 | 7.886 | 26.516 | 5.70 | 1 |
| 250 | 7.661 | 34.038 | 7.636 | 26.572 | 6.08 | 1 |
| 300 | 7.395 | 34.175 | 7.366 | 26.718 | 6.80 | 1 |
| 400 | 6.513 | 34.216 | 6.477 | 26.872 | 8.11 | 1 |
| 500 | 6.082 | 34.306 | 6.038 | 27.000 | 9.29 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 20 | 186: 2:21 | 31 37.4 N | 120 2.8 W | 11 | 1 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 17.301 | 33.418 | 17.301 | 24.230 | 0. | 2 |
| 10 | 17.297 | 33.440 | 17.295 | 24.248 | 0.37 | 1 |
| 20 | 17.184 | 33.503 | 17.181 | 24.324 | 0.74 | 1 |
| 30 | 14.287 | 33.236 | 14.283 | 24.766 | 1.07 | 1 |
| 40 | 13.543 | 33.303 | 13.537 | 24.971 | 1.38 | 1 |
| 50 | 13.159 | 33.302 | 13.152 | 25.048 | 1.68 | 1 |
| 60 | 12.954 | 33.421 | 12.946 | 25.181 | 1.97 | 1 |
| 70 | 11.859 | 33.355 | 11.850 | 25.340 | 2.24 | 1 |
| 80 | 11.897 | 33.445 | 11.887 | 25.403 | 2.50 | 1 |
| 90 | 11.807 | 33.524 | 11.796 | 25.482 | 2.76 | 1 |
| 100 | 11.363 | 33.545 | 11.351 | 25.580 | 3.01 | 1 |
| 125 | 10.326 | 33.627 | 10.311 | 25.827 | 3.58 | 1 |
| 150 | 9.686 | 33.756 | 9.669 | 26.036 | 4.10 | 1 |
| 175 | 9.035 | 33.889 | 9.016 | 26.246 | 4.57 | 1 |
| 200 | 8.467 | 33.967 | 8.446 | 26.396 | 5.01 | 1 |
| 225 | 8.181 | 34.005 | 8.158 | 26.469 | 5.42 | 1 |
| 250 | 7.796 | 34.050 | 7.771 | 26.562 | 5.81 | 1 |
| 300 | 7.266 | 34.107 | 7.237 | 26.683 | 6.54 | 1 |
| 400 | 6.353 | 34.177 | 6.317 | 26.862 | 7.86 | 1 |
| 500 | 5.553 | 34.227 | 5.511 | 27.002 | 9.03 | 1 |

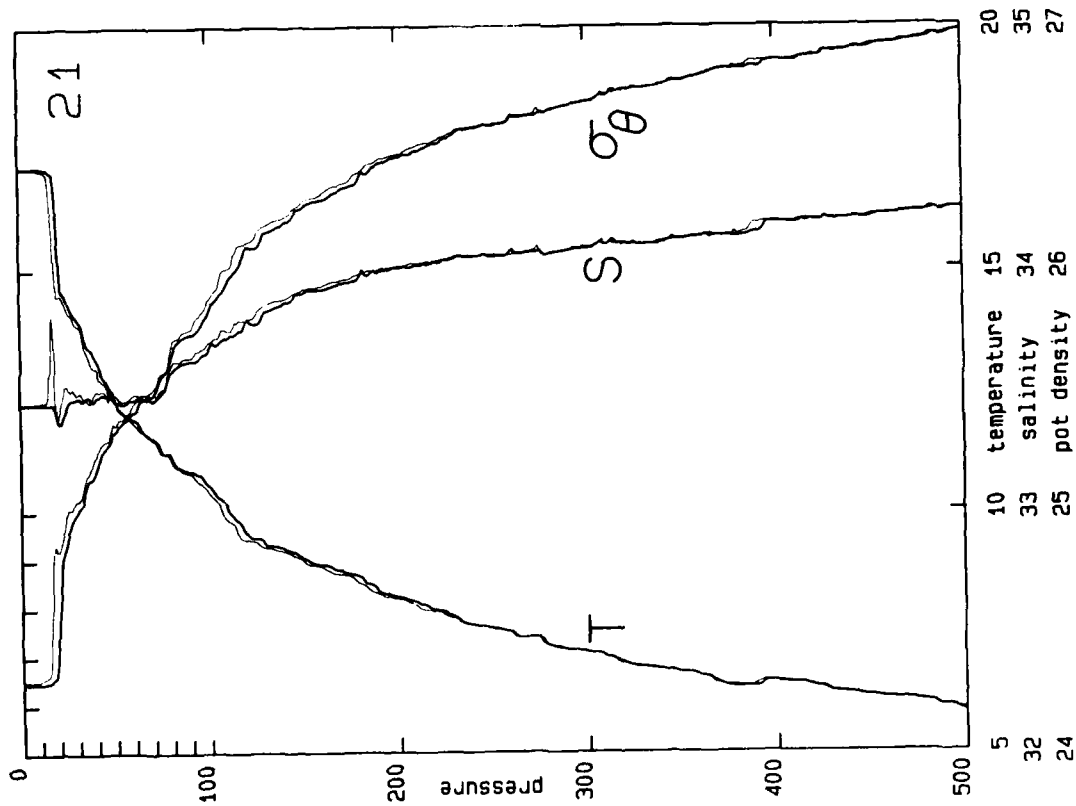
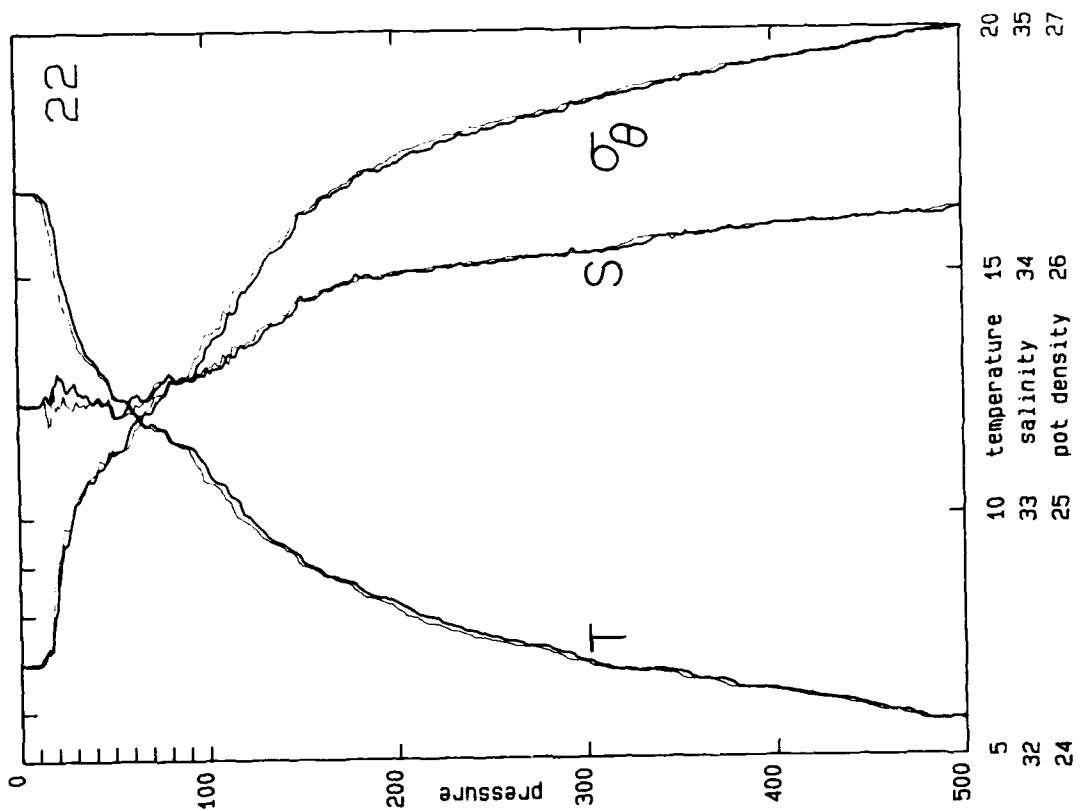


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 21 | 186: 4:39 | 31 53.6 N | 120 6.7 W | 11 | 0 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 17.130 | 33.450 | 17.130 | 24.295 | 0. | 2 |
| 10 | 17.135 | 33.449 | 17.133 | 24.294 | 0.36 | 1 |
| 20 | 15.890 | 33.379 | 15.887 | 24.527 | 0.73 | 1 |
| 30 | 14.019 | 33.473 | 14.015 | 25.005 | 1.03 | 1 |
| 40 | 13.157 | 33.469 | 13.152 | 25.177 | 1.32 | 1 |
| 50 | 12.380 | 33.472 | 12.373 | 25.332 | 1.59 | 1 |
| 60 | 11.909 | 33.466 | 11.901 | 25.417 | 1.85 | 1 |
| 70 | 11.538 | 33.466 | 11.529 | 25.486 | 2.11 | 1 |
| 80 | 11.117 | 33.579 | 11.107 | 25.650 | 2.35 | 1 |
| 90 | 10.840 | 33.627 | 10.829 | 25.737 | 2.58 | 1 |
| 100 | 10.529 | 33.675 | 10.517 | 25.829 | 2.81 | 1 |
| 125 | 9.444 | 33.776 | 9.430 | 26.091 | 3.32 | 1 |
| 150 | 9.020 | 33.901 | 9.004 | 26.257 | 3.79 | 1 |
| 175 | 8.687 | 33.949 | 8.669 | 26.348 | 4.22 | 1 |
| 200 | 8.200 | 34.006 | 8.180 | 26.467 | 4.64 | 1 |
| 225 | 7.855 | 34.036 | 7.833 | 26.542 | 5.03 | 1 |
| 250 | 7.552 | 34.048 | 7.528 | 26.595 | 5.40 | 1 |
| 300 | 7.049 | 34.083 | 7.021 | 26.694 | 6.12 | 1 |
| 400 | 6.441 | 34.185 | 6.405 | 26.857 | 7.44 | 1 |
| 500 | 5.787 | 34.243 | 5.744 | 26.987 | 8.64 | 4 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 22 | 186: 8: 8 | 32 11.7 N | 120 9.9 W | 5 | 3 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 16.746 | 33.468 | 16.746 | 24.399 | 0. | 2 |
| 10 | 16.747 | 33.468 | 16.745 | 24.399 | 0.35 | 1 |
| 20 | 16.030 | 33.559 | 16.027 | 24.634 | 0.70 | 1 |
| 30 | 14.047 | 33.561 | 14.043 | 25.067 | 1.01 | 1 |
| 40 | 13.279 | 33.472 | 13.273 | 25.155 | 1.29 | 1 |
| 50 | 12.551 | 33.443 | 12.544 | 25.277 | 1.57 | 1 |
| 60 | 12.217 | 33.500 | 12.209 | 25.385 | 1.84 | 1 |
| 70 | 11.952 | 33.499 | 11.943 | 25.435 | 2.10 | 1 |
| 80 | 11.671 | 33.602 | 11.661 | 25.567 | 2.35 | 1 |
| 90 | 11.475 | 33.572 | 11.464 | 25.580 | 2.59 | 1 |
| 100 | 10.965 | 33.597 | 10.953 | 25.692 | 2.83 | 1 |
| 125 | 9.850 | 33.717 | 9.836 | 25.978 | 3.38 | 1 |
| 150 | 9.052 | 33.910 | 9.036 | 26.259 | 3.86 | 1 |
| 175 | 8.648 | 33.960 | 8.630 | 26.362 | 4.30 | 1 |
| 200 | 8.193 | 33.997 | 8.173 | 26.461 | 4.71 | 1 |
| 225 | 7.764 | 34.026 | 7.742 | 26.547 | 5.10 | 1 |
| 250 | 7.497 | 34.039 | 7.473 | 26.596 | 5.48 | 1 |
| 300 | 6.986 | 34.078 | 6.958 | 26.698 | 6.19 | 1 |
| 400 | 6.350 | 34.197 | 6.314 | 26.878 | 7.50 | 1 |
| 500 | 5.715 | 34.251 | 5.672 | 27.002 | 8.68 | 1 |

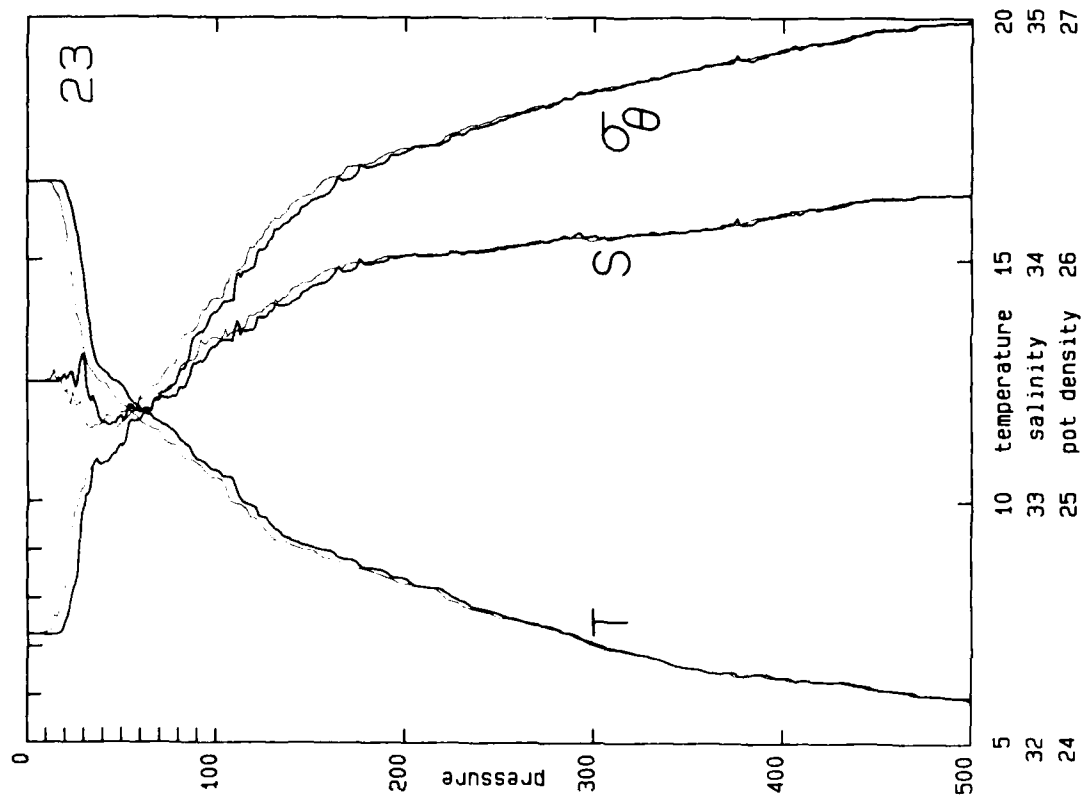
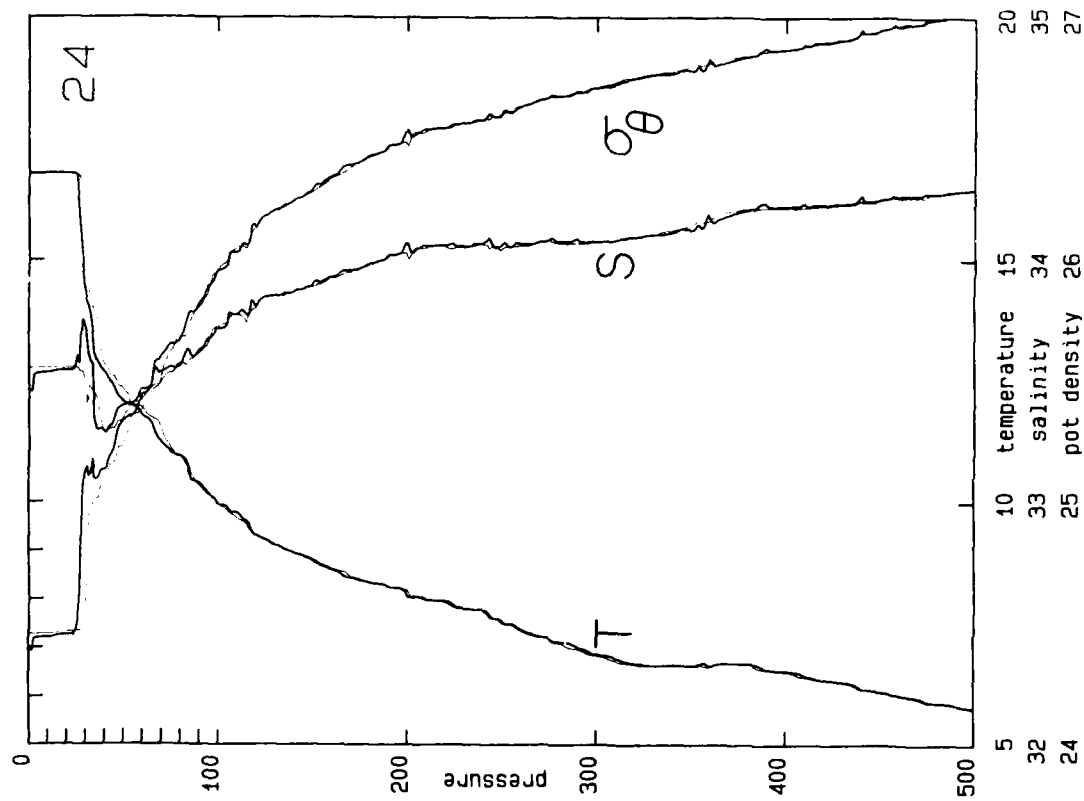


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 23 | 186:10:30 | 32 30.0 N | 120 13.9 W | 2 | 9 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 16.607 | 33.495 | 16.607 | 24.452 | 0. | 2 |
| 10 | 16.620 | 33.493 | 16.618 | 24.448 | 0.35 | 1 |
| 20 | 16.484 | 33.521 | 16.481 | 24.501 | 0.70 | 1 |
| 30 | 14.623 | 33.608 | 14.619 | 24.982 | 1.03 | 1 |
| 40 | 12.700 | 33.322 | 12.695 | 25.154 | 1.31 | 1 |
| 50 | 12.385 | 33.346 | 12.378 | 25.233 | 1.59 | 1 |
| 60 | 11.903 | 33.365 | 11.895 | 25.340 | 1.86 | 1 |
| 70 | 11.623 | 33.418 | 11.614 | 25.433 | 2.12 | 1 |
| 80 | 11.286 | 33.462 | 11.276 | 25.529 | 2.37 | 1 |
| 90 | 10.852 | 33.569 | 10.841 | 25.690 | 2.62 | 1 |
| 100 | 10.628 | 33.641 | 10.616 | 25.786 | 2.84 | 1 |
| 125 | 9.650 | 33.756 | 9.636 | 26.042 | 3.37 | 1 |
| 150 | 9.039 | 33.884 | 9.023 | 26.241 | 3.84 | 1 |
| 175 | 8.657 | 34.002 | 8.639 | 26.394 | 4.28 | 1 |
| 200 | 8.382 | 34.017 | 8.361 | 26.448 | 4.69 | 1 |
| 225 | 7.994 | 34.028 | 7.971 | 26.515 | 5.09 | 1 |
| 250 | 7.636 | 34.045 | 7.611 | 26.581 | 5.48 | 1 |
| 300 | 7.033 | 34.085 | 7.005 | 26.698 | 6.20 | 1 |
| 400 | 6.362 | 34.189 | 6.326 | 26.870 | 7.51 | 1 |
| 500 | 5.908 | 34.273 | 5.864 | 26.995 | 8.69 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 24 | 186:12:50 | 32 47.0 N | 120 16.8 W | 5 | 16 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 16.765 | 33.458 | 16.765 | 24.387 | 0. | 2 |
| 10 | 16.779 | 33.534 | 16.777 | 24.443 | 0.35 | 1 |
| 20 | 16.763 | 33.543 | 16.760 | 24.453 | 0.70 | 1 |
| 30 | 14.364 | 33.725 | 14.360 | 25.127 | 1.03 | 1 |
| 40 | 12.674 | 33.286 | 12.669 | 25.131 | 1.32 | 1 |
| 50 | 12.052 | 33.396 | 12.046 | 25.335 | 1.59 | 1 |
| 60 | 11.762 | 33.464 | 11.754 | 25.443 | 1.85 | 1 |
| 70 | 11.195 | 33.539 | 11.186 | 25.605 | 2.10 | 1 |
| 80 | 10.937 | 33.561 | 10.927 | 25.668 | 2.34 | 1 |
| 90 | 10.353 | 33.626 | 10.342 | 25.821 | 2.56 | 1 |
| 100 | 9.942 | 33.724 | 9.931 | 25.968 | 2.78 | 1 |
| 125 | 9.212 | 33.846 | 9.198 | 26.183 | 3.27 | 1 |
| 150 | 8.771 | 33.903 | 8.755 | 26.298 | 3.72 | 1 |
| 175 | 8.365 | 33.972 | 8.347 | 26.415 | 4.15 | 1 |
| 200 | 8.021 | 34.040 | 8.001 | 26.520 | 4.55 | 1 |
| 225 | 7.824 | 34.053 | 7.802 | 26.560 | 4.93 | 1 |
| 250 | 7.494 | 34.075 | 7.470 | 26.625 | 5.31 | 1 |
| 300 | 6.850 | 34.076 | 6.822 | 26.715 | 6.02 | 1 |
| 400 | 6.520 | 34.221 | 6.484 | 26.875 | 7.32 | 1 |
| 500 | 5.729 | 34.294 | 5.686 | 27.034 | 8.48 | 4 |

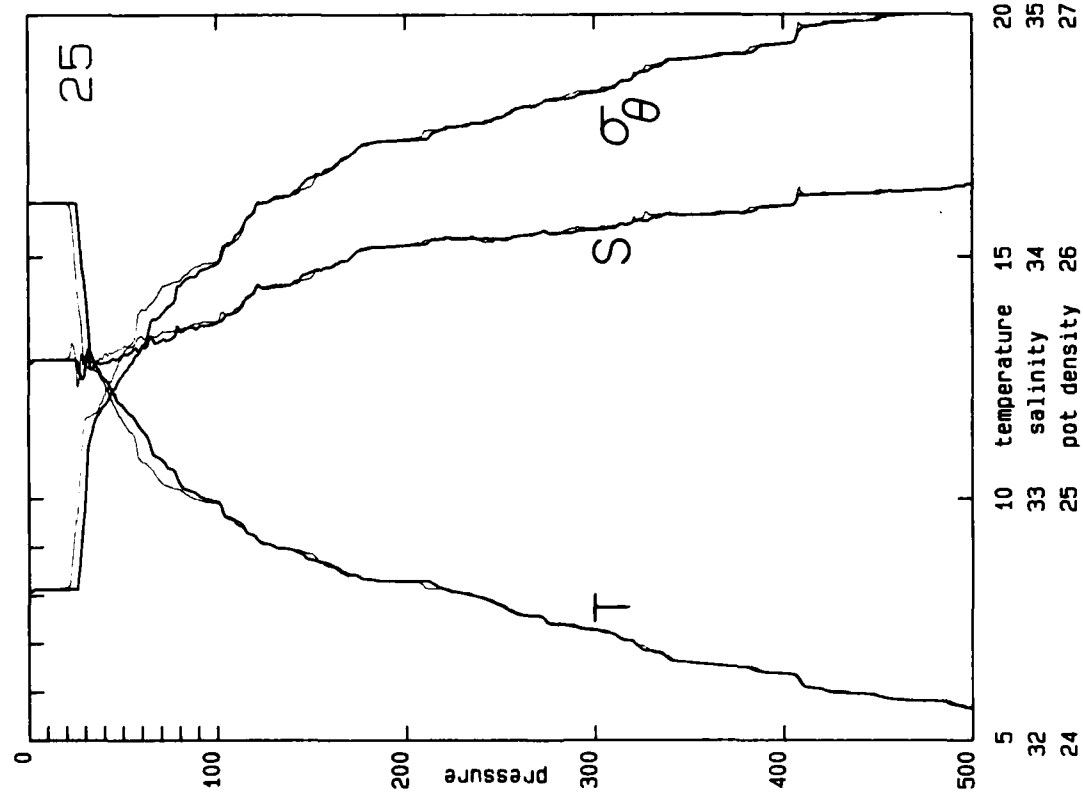
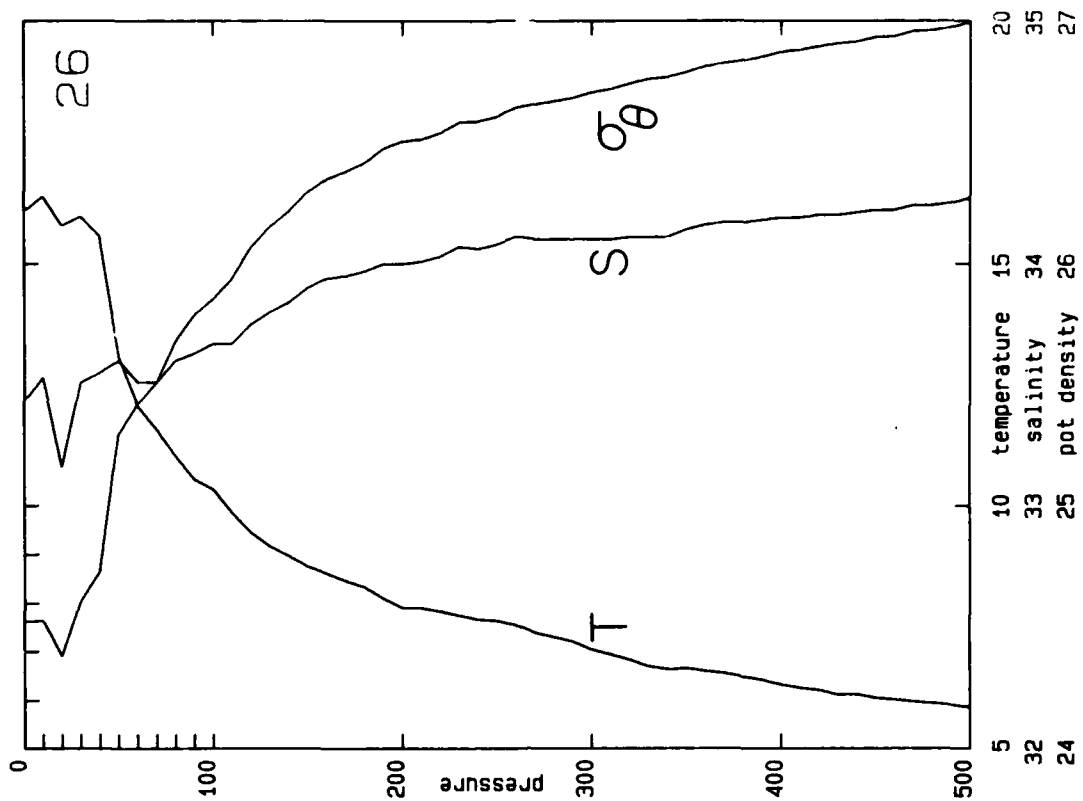


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|----------|--------------------------|----------------------|----------------------------|------|
| 25 | 186:15: 8 | 33 4.2 N | 120 20.8 W | 5 | 12 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 16.123 | 33.563 | 16.123 | 24.615 | 0. | 2 |
| 10 | 16.122 | 33.575 | 16.120 | 24.625 | 0.33 | 1 |
| 20 | 16.118 | 33.576 | 16.115 | 24.627 | 0.67 | 1 |
| 30 | 14.414 | 33.518 | 14.410 | 24.957 | 0.99 | 1 |
| 40 | 12.473 | 33.564 | 12.468 | 25.385 | 1.26 | 1 |
| 50 | 11.927 | 33.597 | 11.921 | 25.515 | 1.52 | 1 |
| 60 | 11.422 | 33.623 | 11.415 | 25.629 | 1.76 | 1 |
| 70 | 10.807 | 33.658 | 10.799 | 25.767 | 1.99 | 1 |
| 80 | 10.289 | 33.693 | 10.280 | 25.884 | 2.21 | 1 |
| 90 | 10.049 | 33.713 | 10.039 | 25.941 | 2.42 | 1 |
| 100 | 9.931 | 33.731 | 9.920 | 25.975 | 2.63 | 1 |
| 125 | 9.056 | 33.870 | 9.043 | 26.227 | 3.11 | 1 |
| 150 | 8.724 | 33.938 | 8.708 | 26.333 | 3.55 | 1 |
| 175 | 8.347 | 34.026 | 8.329 | 26.460 | 3.97 | 1 |
| 200 | 8.289 | 34.049 | 8.268 | 26.487 | 4.37 | 1 |
| 225 | 8.059 | 34.074 | 8.036 | 26.541 | 4.76 | 1 |
| 250 | 7.774 | 34.073 | 7.749 | 26.583 | 5.14 | 1 |
| 300 | 7.270 | 34.113 | 7.241 | 26.687 | 5.86 | 1 |
| 400 | 6.369 | 34.211 | 6.333 | 26.887 | 7.15 | 1 |
| 500 | 5.655 | 34.299 | 5.612 | 27.047 | 8.28 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 26 | 186:19: 8 | 33 18.4 N | 120 46.4 W | 2 | 36 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 16.127 | 33.430 | 16.127 | 24.512 | 0. | 2 |
| 10 | 16.412 | 33.520 | 16.410 | 24.517 | 0.34 | 1 |
| 20 | 15.808 | 33.150 | 15.805 | 24.370 | 0.69 | 1 |
| 30 | 15.997 | 33.500 | 15.992 | 24.597 | 1.04 | 1 |
| 40 | 15.591 | 33.540 | 15.585 | 24.719 | 1.37 | 1 |
| 50 | 13.103 | 33.590 | 13.096 | 25.282 | 1.67 | 1 |
| 60 | 12.095 | 33.500 | 12.087 | 25.408 | 1.93 | 1 |
| 70 | 11.611 | 33.500 | 11.602 | 25.499 | 2.19 | 1 |
| 80 | 11.065 | 33.590 | 11.055 | 25.668 | 2.43 | 1 |
| 90 | 10.577 | 33.620 | 10.566 | 25.778 | 2.66 | 1 |
| 100 | 10.373 | 33.660 | 10.361 | 25.844 | 2.88 | 1 |
| 125 | 9.332 | 33.765 | 9.318 | 26.101 | 3.39 | 1 |
| 150 | 8.774 | 33.890 | 8.758 | 26.287 | 3.86 | 1 |
| 175 | 8.417 | 33.950 | 8.399 | 26.390 | 4.28 | 1 |
| 200 | 7.925 | 33.990 | 7.905 | 26.495 | 4.69 | 1 |
| 225 | 7.811 | 34.040 | 7.789 | 26.551 | 5.08 | 1 |
| 250 | 7.660 | 34.070 | 7.635 | 26.597 | 5.45 | 1 |
| 300 | 7.069 | 34.090 | 7.041 | 26.697 | 6.17 | 1 |
| 400 | 6.349 | 34.180 | 6.313 | 26.865 | 7.49 | 1 |
| 500 | 5.879 | 34.260 | 5.836 | 26.989 | 8.69 | 1 |

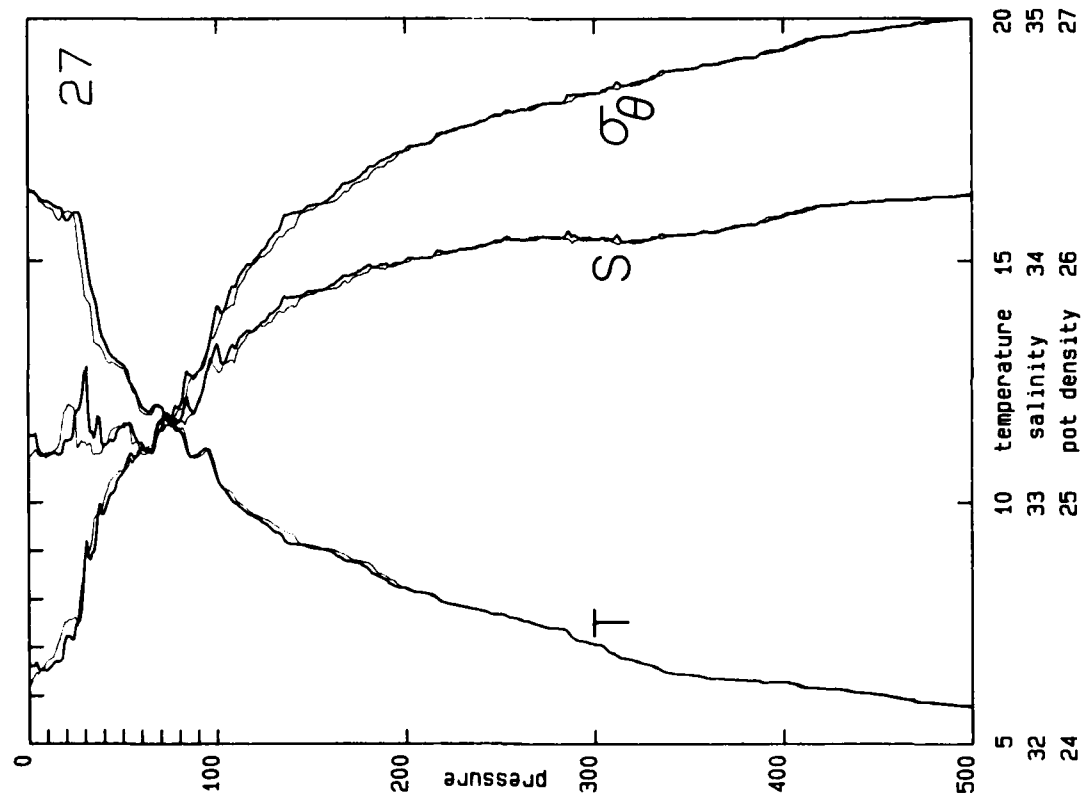
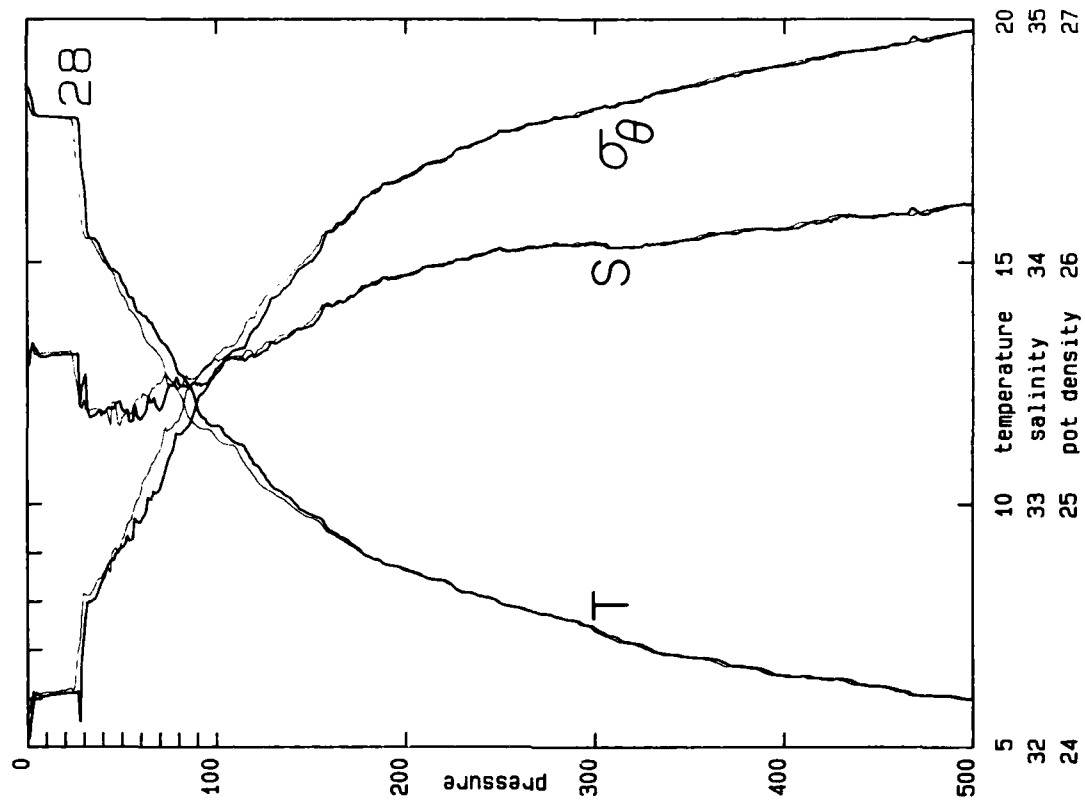


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 27 | 186:22:21 | 32 59.8 N | 121 1.4 W | 5 | 5 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 16.437 | 33.277 | 16.437 | 24.324 | 0. | 2 |
| 10 | 16.229 | 33.188 | 16.227 | 24.303 | 0.36 | 1 |
| 20 | 15.833 | 33.259 | 15.830 | 24.448 | 0.72 | 1 |
| 30 | 15.353 | 33.544 | 15.348 | 24.774 | 1.07 | 1 |
| 40 | 13.345 | 33.230 | 13.339 | 24.955 | 1.38 | 1 |
| 50 | 12.840 | 33.316 | 12.833 | 25.122 | 1.67 | 1 |
| 60 | 11.999 | 33.238 | 11.991 | 25.223 | 1.95 | 1 |
| 70 | 11.981 | 33.335 | 11.972 | 25.302 | 2.22 | 1 |
| 80 | 11.485 | 33.341 | 11.475 | 25.399 | 2.49 | 1 |
| 90 | 10.998 | 33.421 | 10.987 | 25.549 | 2.74 | 1 |
| 100 | 10.475 | 33.655 | 10.463 | 25.823 | 2.97 | 1 |
| 125 | 9.558 | 33.748 | 9.544 | 26.051 | 3.50 | 1 |
| 150 | 9.044 | 33.874 | 9.028 | 26.232 | 3.97 | 1 |
| 175 | 8.722 | 33.956 | 8.703 | 26.347 | 4.41 | 1 |
| 200 | 8.187 | 34.008 | 8.167 | 26.470 | 4.82 | 1 |
| 225 | 7.865 | 34.037 | 7.843 | 26.541 | 5.21 | 1 |
| 250 | 7.662 | 34.082 | 7.637 | 26.606 | 5.59 | 1 |
| 300 | 7.055 | 34.088 | 7.027 | 26.697 | 6.30 | 1 |
| 400 | 6.281 | 34.190 | 6.245 | 26.881 | 7.61 | 1 |
| 500 | 5.758 | 34.277 | 5.715 | 27.017 | 8.77 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 28 | 187: 0:48 | 32 41.1 N | 120 59.0 W | 8 | 2 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 18.587 | 33.576 | 18.587 | 24.038 | 0. | 2 |
| 10 | 17.991 | 33.610 | 17.989 | 24.211 | 0.38 | 1 |
| 20 | 17.973 | 33.620 | 17.970 | 24.224 | 0.75 | 1 |
| 30 | 16.672 | 33.505 | 16.667 | 24.446 | 1.12 | 1 |
| 40 | 15.155 | 33.377 | 15.149 | 24.689 | 1.45 | 1 |
| 50 | 14.568 | 33.385 | 14.561 | 24.822 | 1.77 | 1 |
| 60 | 13.935 | 33.348 | 13.926 | 24.927 | 2.08 | 1 |
| 70 | 13.366 | 33.414 | 13.356 | 25.094 | 2.38 | 1 |
| 80 | 12.679 | 33.488 | 12.668 | 25.287 | 2.66 | 1 |
| 90 | 11.917 | 33.504 | 11.905 | 25.446 | 2.92 | 1 |
| 100 | 11.619 | 33.563 | 11.606 | 25.547 | 3.17 | 1 |
| 125 | 10.609 | 33.637 | 10.594 | 25.786 | 3.76 | 1 |
| 150 | 9.772 | 33.742 | 9.755 | 26.011 | 4.29 | 1 |
| 175 | 9.056 | 33.887 | 9.037 | 26.241 | 4.77 | 1 |
| 200 | 8.642 | 33.944 | 8.621 | 26.351 | 5.21 | 1 |
| 225 | 8.267 | 34.008 | 8.244 | 26.458 | 5.63 | 1 |
| 250 | 7.930 | 34.045 | 7.905 | 26.538 | 6.02 | 1 |
| 300 | 7.404 | 34.080 | 7.375 | 26.642 | 6.77 | 1 |
| 400 | 6.472 | 34.136 | 6.436 | 26.814 | 8.14 | 1 |
| 500 | 5.972 | 34.241 | 5.928 | 26.962 | 9.37 | 1 |

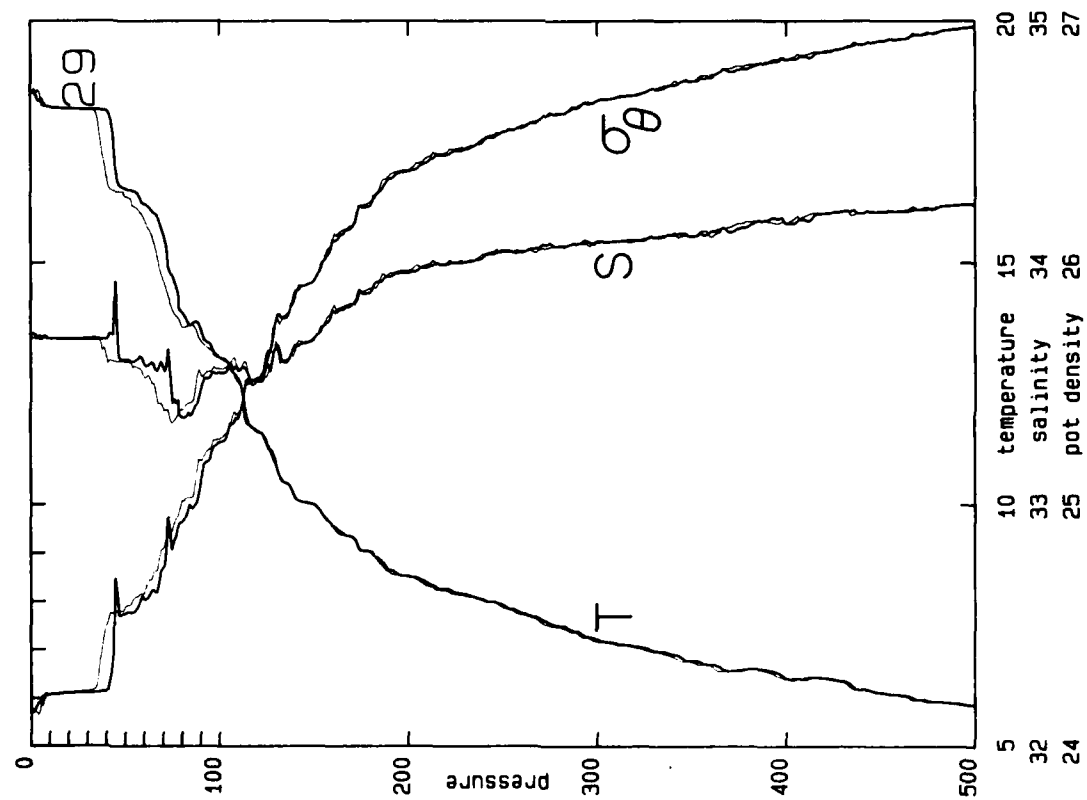
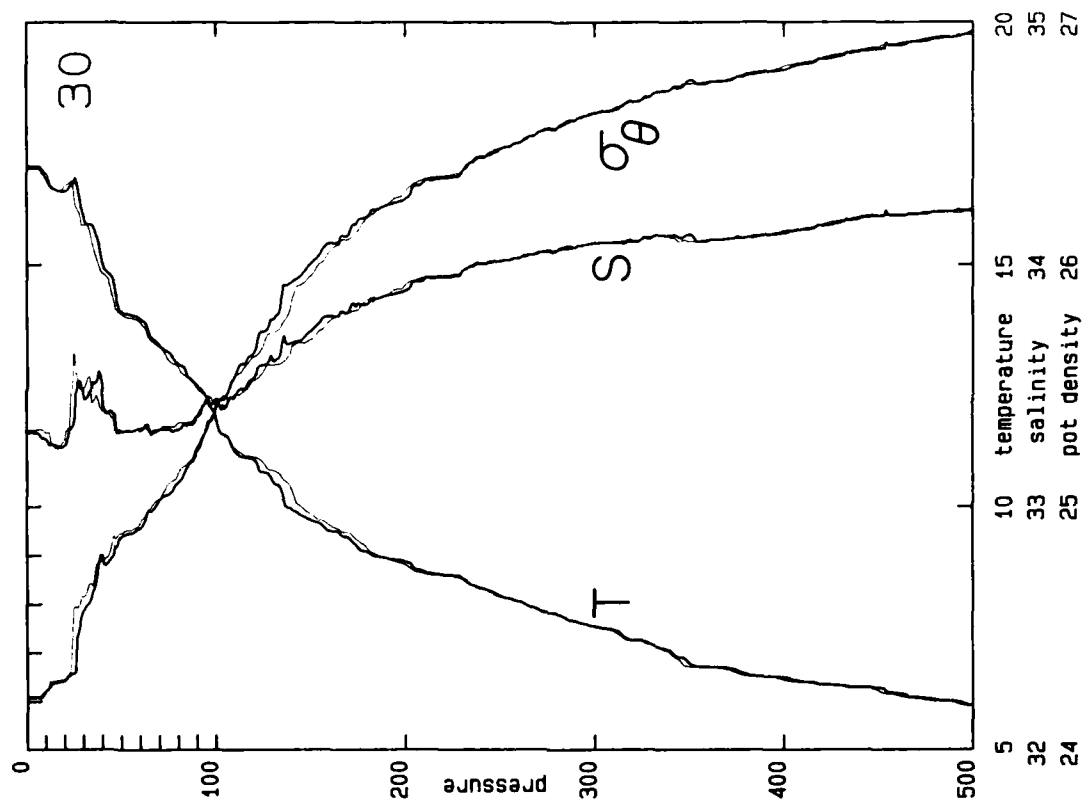


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 29 | 187: 3: 4 | 32 25.9 N | 120 54.2 W | 9 | 3 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 18.538 | 33.707 | 18.538 | 24.150 | 0. | 2 |
| 10 | 18.222 | 33.686 | 18.220 | 24.213 | 0.38 | 1 |
| 20 | 18.184 | 33.685 | 18.181 | 24.222 | 0.75 | 1 |
| 30 | 18.172 | 33.684 | 18.167 | 24.225 | 1.12 | 1 |
| 40 | 18.151 | 33.684 | 18.144 | 24.230 | 1.49 | 1 |
| 50 | 16.529 | 33.597 | 16.521 | 24.550 | 1.84 | 1 |
| 60 | 16.218 | 33.574 | 16.208 | 24.604 | 2.18 | 1 |
| 70 | 15.582 | 33.547 | 15.571 | 24.727 | 2.51 | 1 |
| 80 | 13.950 | 33.367 | 13.939 | 24.939 | 2.82 | 1 |
| 90 | 13.608 | 33.488 | 13.595 | 25.103 | 3.12 | 1 |
| 100 | 13.038 | 33.549 | 13.024 | 25.265 | 3.40 | 1 |
| 125 | 11.207 | 33.579 | 11.192 | 25.635 | 4.05 | 1 |
| 150 | 9.979 | 33.689 | 9.962 | 25.935 | 4.60 | 1 |
| 175 | 9.042 | 33.868 | 9.023 | 26.228 | 5.09 | 1 |
| 200 | 8.502 | 33.959 | 8.481 | 26.384 | 5.52 | 1 |
| 225 | 8.164 | 34.000 | 8.141 | 26.468 | 5.93 | 1 |
| 250 | 7.881 | 34.049 | 7.856 | 26.548 | 6.33 | 1 |
| 300 | 7.177 | 34.090 | 7.148 | 26.682 | 7.06 | 1 |
| 400 | 6.378 | 34.162 | 6.342 | 26.847 | 8.40 | 1 |
| 500 | 5.835 | 34.245 | 5.792 | 26.982 | 9.60 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|----------|--------------------------|----------------------|----------------------------|------|
| 30 | 187: 5:18 | 32 7.9 N | 120 51.2 W | 8 | 1 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 16.994 | 33.309 | 16.994 | 24.219 | 0. | 2 |
| 10 | 16.803 | 33.280 | 16.801 | 24.242 | 0.37 | 1 |
| 20 | 16.510 | 33.252 | 16.507 | 24.289 | 0.74 | 1 |
| 30 | 16.006 | 33.468 | 16.001 | 24.570 | 1.09 | 1 |
| 40 | 15.011 | 33.478 | 15.005 | 24.798 | 1.42 | 1 |
| 50 | 14.016 | 33.309 | 14.009 | 24.879 | 1.74 | 1 |
| 60 | 13.876 | 33.313 | 13.867 | 24.912 | 2.05 | 1 |
| 70 | 13.326 | 33.323 | 13.316 | 25.031 | 2.35 | 1 |
| 80 | 12.937 | 33.320 | 12.926 | 25.107 | 2.64 | 1 |
| 90 | 12.474 | 33.375 | 12.462 | 25.240 | 2.92 | 1 |
| 100 | 11.821 | 33.447 | 11.808 | 25.420 | 3.19 | 1 |
| 125 | 10.719 | 33.591 | 10.704 | 25.731 | 3.80 | 1 |
| 150 | 9.726 | 33.730 | 9.709 | 26.009 | 4.34 | 1 |
| 175 | 9.124 | 33.837 | 9.105 | 26.191 | 4.82 | 1 |
| 200 | 8.860 | 33.897 | 8.839 | 26.280 | 5.28 | 1 |
| 225 | 8.589 | 33.954 | 8.565 | 26.367 | 5.71 | 1 |
| 250 | 8.141 | 34.017 | 8.116 | 26.485 | 6.12 | 1 |
| 300 | 7.531 | 34.088 | 7.502 | 26.630 | 6.88 | 1 |
| 400 | 6.482 | 34.133 | 6.446 | 26.810 | 8.25 | 1 |
| 500 | 5.900 | 34.228 | 5.857 | 26.961 | 9.47 | 1 |

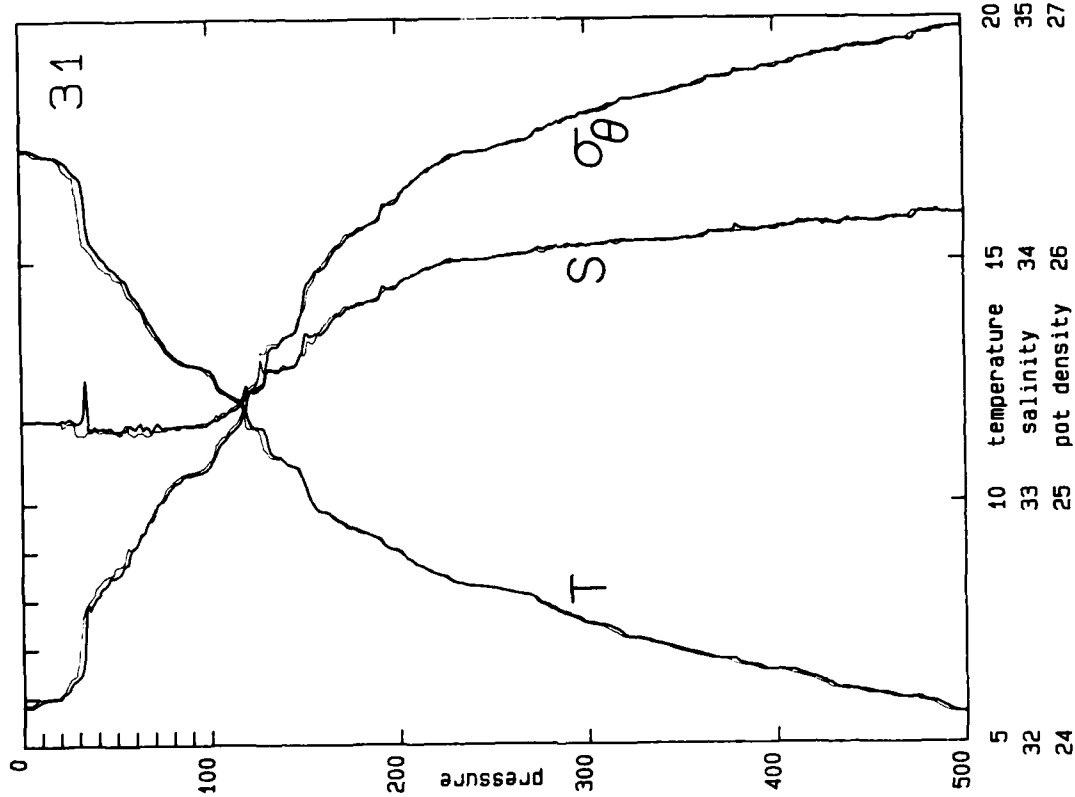
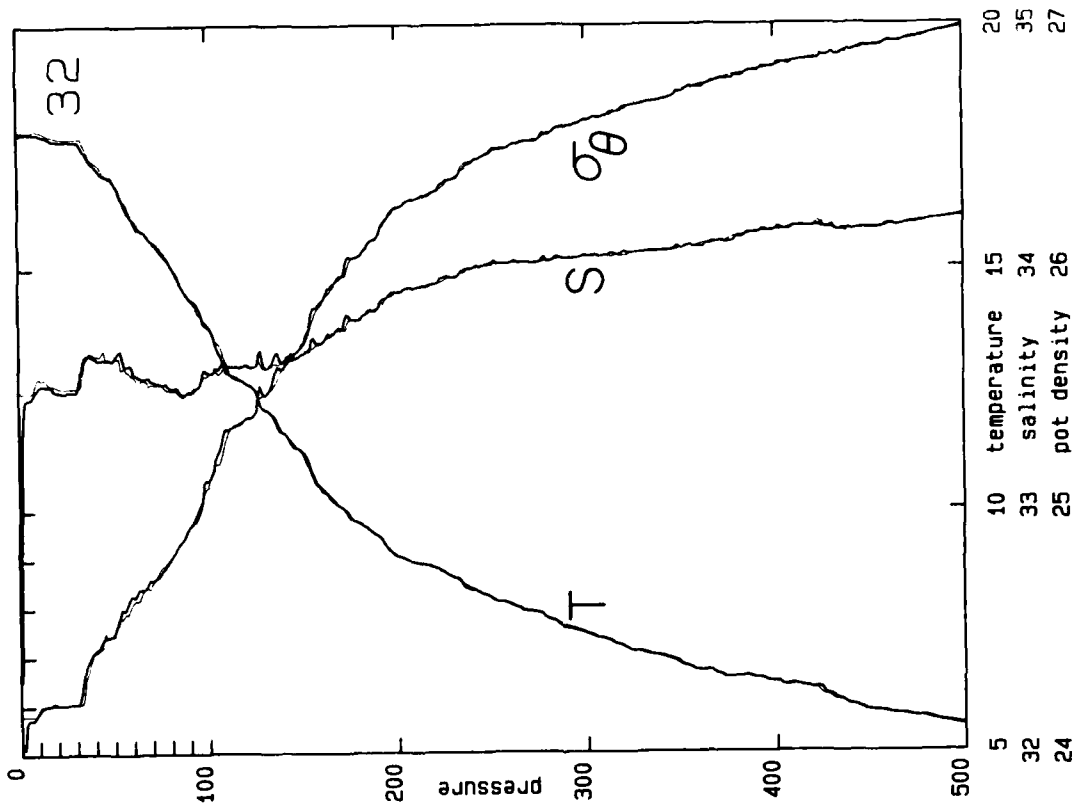


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 31 | 187: 7:33 | 31 51.0 N | 120 48.2 W | 5 | 4 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 17.343 | 33.347 | 17.343 | 24.166 | 0. | 2 |
| 10 | 17.248 | 33.348 | 17.246 | 24.190 | 0.38 | 1 |
| 20 | 17.160 | 33.346 | 17.157 | 24.209 | 0.75 | 1 |
| 30 | 16.788 | 33.339 | 16.783 | 24.291 | 1.12 | 1 |
| 40 | 15.245 | 33.312 | 15.239 | 24.620 | 1.46 | 1 |
| 50 | 14.826 | 33.302 | 14.819 | 24.703 | 1.79 | 1 |
| 60 | 14.283 | 33.310 | 14.274 | 24.825 | 2.11 | 1 |
| 70 | 13.625 | 33.305 | 13.615 | 24.957 | 2.42 | 1 |
| 80 | 13.069 | 33.318 | 13.058 | 25.079 | 2.72 | 1 |
| 90 | 12.859 | 33.321 | 12.847 | 25.123 | 3.01 | 1 |
| 100 | 12.721 | 33.339 | 12.708 | 25.164 | 3.29 | 1 |
| 125 | 11.561 | 33.469 | 11.545 | 25.485 | 3.96 | 1 |
| 150 | 10.355 | 33.684 | 10.337 | 25.867 | 4.55 | 1 |
| 175 | 9.478 | 33.809 | 9.459 | 26.112 | 5.06 | 1 |
| 200 | 8.978 | 33.908 | 8.956 | 26.270 | 5.53 | 1 |
| 225 | 8.423 | 34.002 | 8.400 | 26.430 | 5.96 | 1 |
| 250 | 8.214 | 34.013 | 8.188 | 26.471 | 6.36 | 1 |
| 300 | 7.511 | 34.061 | 7.482 | 26.612 | 7.13 | 1 |
| 400 | 6.525 | 34.136 | 6.489 | 26.807 | 8.52 | 1 |
| 500 | 5.613 | 34.189 | 5.571 | 26.965 | 9.74 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 32 | 187: 9:50 | 31 31.3 N | 120 44.0 W | 6 | 5 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 17.749 | 32.310 | 17.749 | 23.275 | 0. | 2 |
| 10 | 17.786 | 33.506 | 17.784 | 24.182 | 0.39 | 1 |
| 20 | 17.646 | 33.496 | 17.643 | 24.208 | 0.76 | 1 |
| 30 | 17.619 | 33.492 | 17.614 | 24.212 | 1.14 | 1 |
| 40 | 17.150 | 33.634 | 17.143 | 24.433 | 1.50 | 1 |
| 50 | 16.814 | 33.624 | 16.806 | 24.505 | 1.84 | 1 |
| 60 | 16.045 | 33.588 | 16.036 | 24.655 | 2.18 | 1 |
| 70 | 15.589 | 33.539 | 15.578 | 24.719 | 2.51 | 1 |
| 80 | 15.085 | 33.508 | 15.073 | 24.807 | 2.83 | 1 |
| 90 | 14.401 | 33.485 | 14.388 | 24.936 | 3.14 | 1 |
| 100 | 13.783 | 33.563 | 13.769 | 25.125 | 3.44 | 1 |
| 125 | 12.484 | 33.598 | 12.467 | 25.412 | 4.11 | 1 |
| 150 | 11.159 | 33.646 | 11.141 | 25.697 | 4.72 | 1 |
| 175 | 9.808 | 33.785 | 9.788 | 26.039 | 5.26 | 1 |
| 200 | 9.043 | 33.901 | 9.021 | 26.255 | 5.74 | 1 |
| 225 | 8.688 | 33.967 | 8.664 | 26.362 | 6.18 | 1 |
| 250 | 8.133 | 34.026 | 8.108 | 26.493 | 6.59 | 1 |
| 300 | 7.440 | 34.048 | 7.411 | 26.612 | 7.37 | 1 |
| 400 | 6.413 | 34.160 | 6.377 | 26.841 | 8.74 | 1 |
| 500 | 5.528 | 34.208 | 5.486 | 26.990 | 9.94 | 1 |

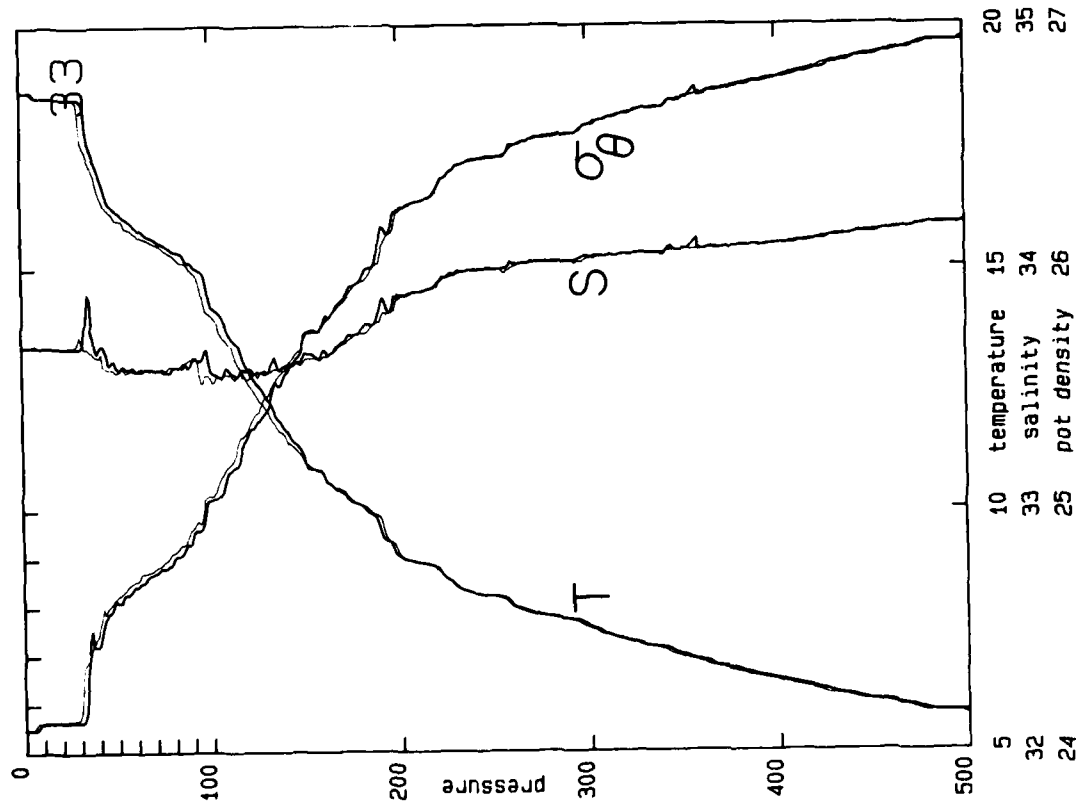
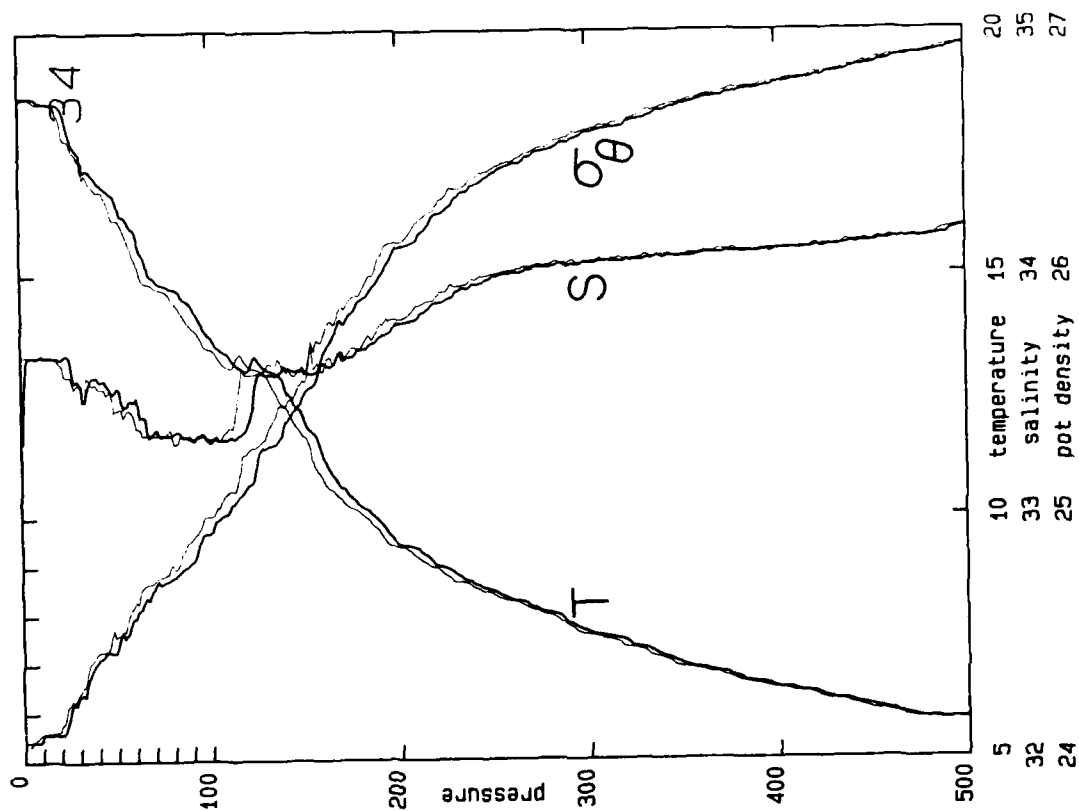


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 33 | 187:12: 5 | 31 14.8 N | 120 40.5 W | 3 | 15 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 18.660 | 33.680 | 18.660 | 24.099 | 0. | 2 |
| 10 | 18.546 | 33.675 | 18.544 | 24.124 | 0.38 | 1 |
| 20 | 18.524 | 33.674 | 18.521 | 24.129 | 0.76 | 1 |
| 30 | 18.515 | 33.674 | 18.510 | 24.132 | 1.15 | 1 |
| 40 | 17.138 | 33.654 | 17.131 | 24.451 | 1.51 | 1 |
| 50 | 16.205 | 33.593 | 16.197 | 24.622 | 1.84 | 1 |
| 60 | 15.867 | 33.578 | 15.858 | 24.687 | 2.18 | 1 |
| 70 | 15.610 | 33.581 | 15.599 | 24.747 | 2.50 | 1 |
| 80 | 15.369 | 33.591 | 15.357 | 24.808 | 2.82 | 1 |
| 90 | 15.074 | 33.617 | 15.060 | 24.893 | 3.14 | 1 |
| 100 | 14.185 | 33.571 | 14.171 | 25.048 | 3.44 | 1 |
| 125 | 12.571 | 33.569 | 12.554 | 25.372 | 4.14 | 1 |
| 150 | 10.949 | 33.649 | 10.931 | 25.736 | 4.76 | 1 |
| 175 | 10.154 | 33.719 | 10.134 | 25.929 | 5.31 | 1 |
| 200 | 8.993 | 33.887 | 8.971 | 26.251 | 5.81 | 1 |
| 225 | 8.526 | 33.963 | 8.502 | 26.384 | 6.25 | 1 |
| 250 | 8.199 | 33.991 | 8.173 | 26.456 | 6.66 | 1 |
| 300 | 7.534 | 34.040 | 7.505 | 26.592 | 7.43 | 1 |
| 400 | 6.459 | 34.095 | 6.423 | 26.783 | 8.84 | 1 |
| 500 | 5.730 | 34.191 | 5.687 | 26.953 | 10.08 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 34 | 187:14:36 | 30 58.0 N | 120 37.2 W | 7 | 36 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 18.657 | 33.314 | 18.657 | 23.820 | 0. | 2 |
| 10 | 18.608 | 33.674 | 18.606 | 24.108 | 0.39 | 1 |
| 20 | 18.531 | 33.661 | 18.528 | 24.118 | 0.77 | 1 |
| 30 | 17.604 | 33.572 | 17.599 | 24.277 | 1.14 | 1 |
| 40 | 17.023 | 33.587 | 17.016 | 24.427 | 1.50 | 1 |
| 50 | 16.647 | 33.528 | 16.639 | 24.470 | 1.86 | 1 |
| 60 | 15.958 | 33.482 | 15.949 | 24.593 | 2.20 | 1 |
| 70 | 14.945 | 33.354 | 14.935 | 24.718 | 2.53 | 1 |
| 80 | 14.724 | 33.345 | 14.712 | 24.759 | 2.85 | 1 |
| 90 | 14.360 | 33.321 | 14.347 | 24.818 | 3.17 | 1 |
| 100 | 13.728 | 33.310 | 13.714 | 24.941 | 3.48 | 1 |
| 125 | 13.233 | 33.593 | 13.216 | 25.260 | 4.21 | 1 |
| 150 | 11.929 | 33.604 | 11.910 | 25.522 | 4.87 | 1 |
| 175 | 10.372 | 33.666 | 10.351 | 25.851 | 5.46 | 1 |
| 200 | 9.415 | 33.799 | 9.393 | 26.115 | 5.97 | 1 |
| 225 | 8.912 | 33.897 | 8.888 | 26.272 | 6.44 | 1 |
| 250 | 8.434 | 33.990 | 8.408 | 26.420 | 6.87 | 1 |
| 300 | 7.581 | 34.039 | 7.552 | 26.585 | 7.66 | 1 |
| 400 | 6.439 | 34.095 | 6.403 | 26.786 | 9.07 | 1 |
| 500 | 5.792 | 34.195 | 5.749 | 26.948 | 10.32 | 4 |

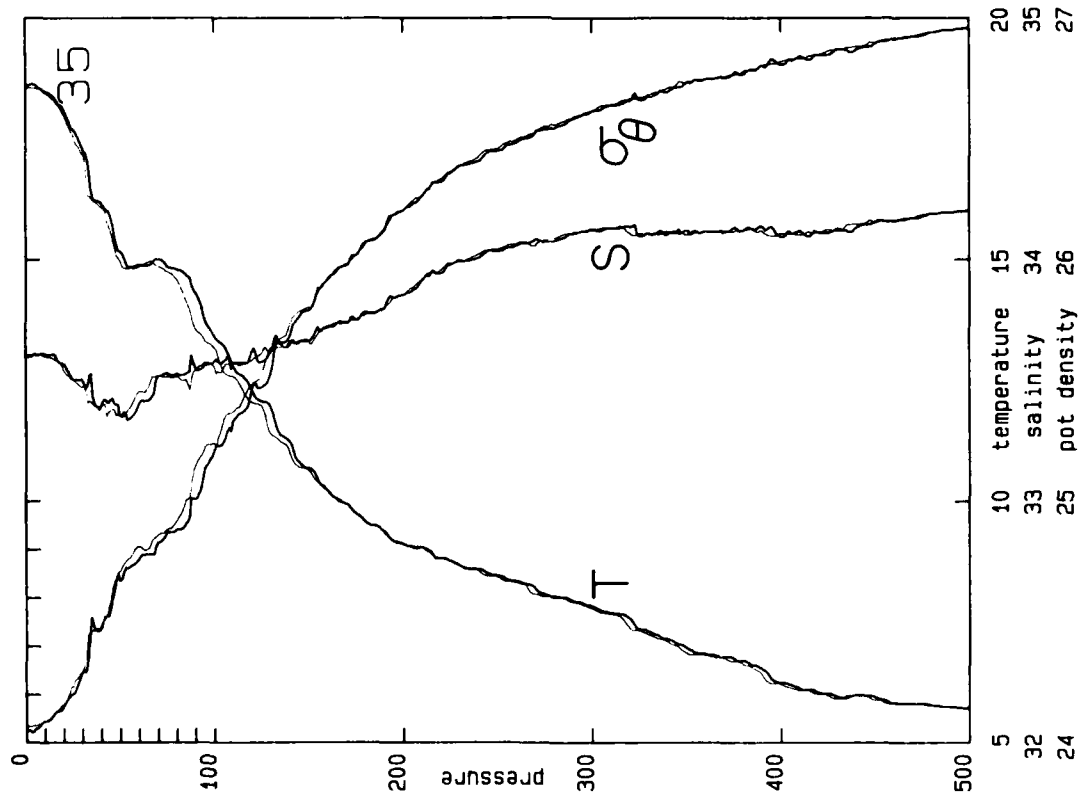
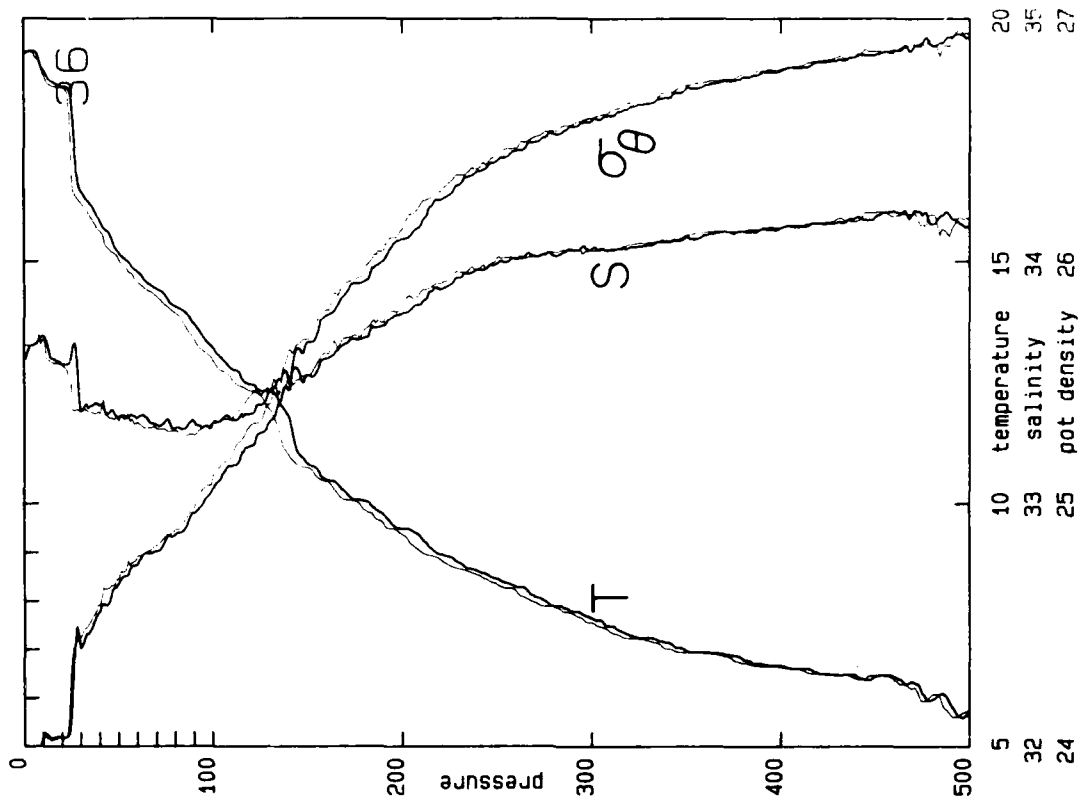


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 35 | 187:18:41 | 30 41.2 N | 120 33.4 W | 5 | 1 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 18.605 | 33.598 | 18.605 | 24.050 | 0. | 2 |
| 10 | 18.486 | 33.610 | 18.484 | 24.089 | 0.39 | 1 |
| 20 | 18.099 | 33.568 | 18.096 | 24.153 | 0.77 | 1 |
| 30 | 17.302 | 33.508 | 17.297 | 24.300 | 1.14 | 1 |
| 40 | 16.173 | 33.395 | 16.167 | 24.476 | 1.49 | 1 |
| 50 | 15.145 | 33.376 | 15.137 | 24.691 | 1.83 | 1 |
| 60 | 14.901 | 33.402 | 14.892 | 24.764 | 2.16 | 1 |
| 70 | 15.003 | 33.518 | 14.992 | 24.832 | 2.47 | 1 |
| 80 | 14.778 | 33.526 | 14.766 | 24.887 | 2.79 | 1 |
| 90 | 14.280 | 33.548 | 14.267 | 25.010 | 3.09 | 1 |
| 100 | 13.391 | 33.581 | 13.377 | 25.219 | 3.38 | 1 |
| 125 | 12.055 | 33.575 | 12.039 | 25.476 | 4.04 | 1 |
| 150 | 10.676 | 33.662 | 10.658 | 25.795 | 4.63 | 1 |
| 175 | 9.721 | 33.747 | 9.701 | 26.024 | 5.16 | 1 |
| 200 | 9.090 | 33.856 | 9.068 | 26.212 | 5.64 | 1 |
| 225 | 8.738 | 33.981 | 8.714 | 26.365 | 6.09 | 1 |
| 250 | 8.437 | 34.035 | 8.411 | 26.454 | 6.50 | 1 |
| 300 | 7.791 | 34.123 | 7.761 | 26.620 | 7.27 | 1 |
| 400 | 6.242 | 34.097 | 6.207 | 26.813 | 8.65 | 1 |
| 500 | 5.696 | 34.206 | 5.653 | 26.969 | 9.87 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 36 | 188: 0:52 | 30 50.0 N | 121 16.6 W | 10 | 3 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 19.295 | 33.600 | 19.295 | 23.878 | 0. | 2 |
| 10 | 18.951 | 33.694 | 18.949 | 24.037 | 0.40 | 1 |
| 20 | 18.591 | 33.578 | 18.588 | 24.039 | 0.79 | 1 |
| 30 | 16.455 | 33.383 | 16.450 | 24.402 | 1.16 | 1 |
| 40 | 15.837 | 33.405 | 15.831 | 24.560 | 1.51 | 1 |
| 50 | 15.162 | 33.365 | 15.154 | 24.679 | 1.84 | 1 |
| 60 | 14.774 | 33.357 | 14.765 | 24.757 | 2.17 | 1 |
| 70 | 14.414 | 33.325 | 14.404 | 24.809 | 2.48 | 1 |
| 80 | 14.053 | 33.312 | 14.042 | 24.875 | 2.80 | 1 |
| 90 | 13.695 | 33.330 | 13.682 | 24.963 | 3.11 | 1 |
| 100 | 13.191 | 33.336 | 13.177 | 25.069 | 3.40 | 1 |
| 125 | 12.328 | 33.409 | 12.312 | 25.295 | 4.11 | 1 |
| 150 | 10.794 | 33.532 | 10.776 | 25.673 | 4.74 | 1 |
| 175 | 10.074 | 33.677 | 10.054 | 25.910 | 5.30 | 1 |
| 200 | 9.481 | 33.788 | 9.459 | 26.096 | 5.82 | 1 |
| 225 | 8.888 | 33.906 | 8.864 | 26.283 | 6.28 | 1 |
| 250 | 8.426 | 33.996 | 8.400 | 26.426 | 6.71 | 1 |
| 300 | 7.612 | 34.064 | 7.582 | 26.600 | 7.49 | 1 |
| 400 | 6.648 | 34.142 | 6.611 | 26.796 | 8.89 | 1 |
| 500 | 5.765 | 34.158 | 5.722 | 26.922 | 10.14 | 1 |

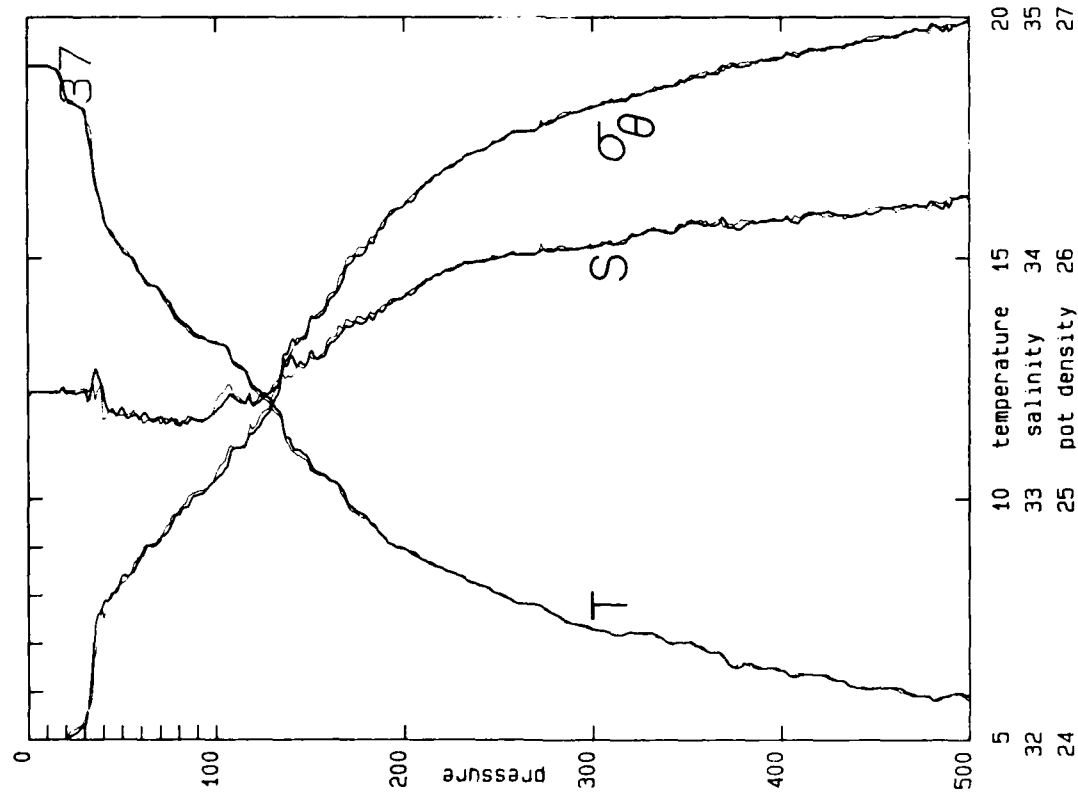
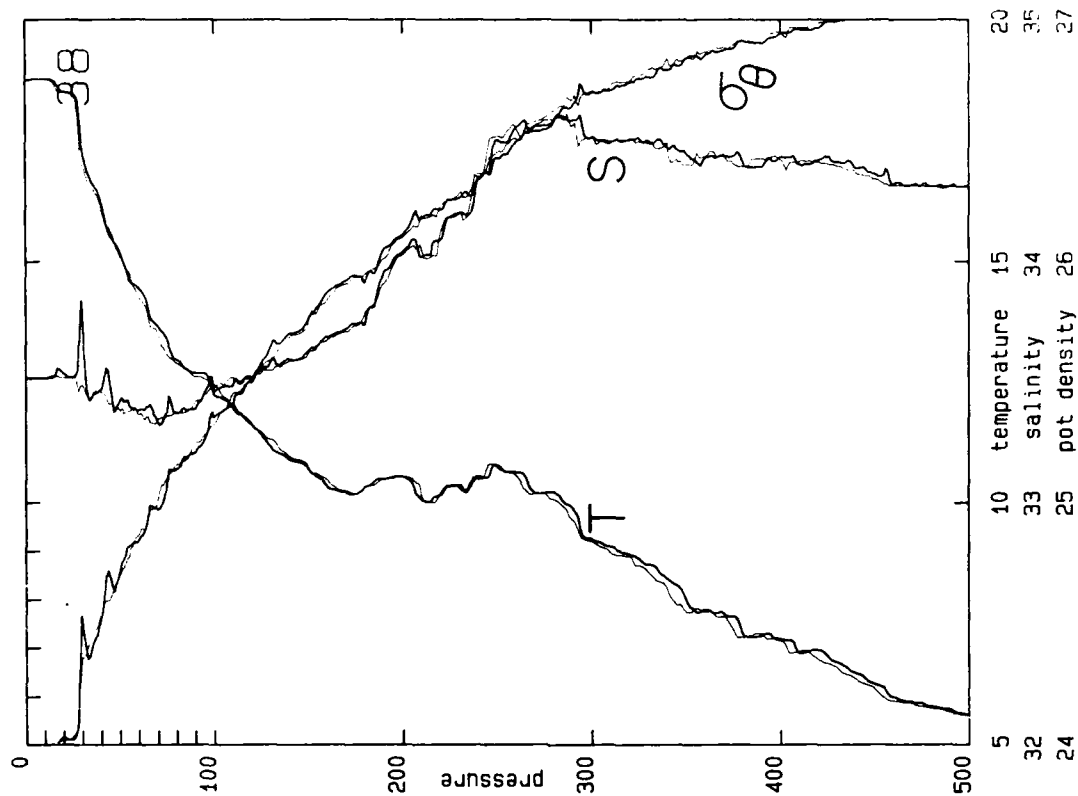


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|----------|--------------------------|----------------------|----------------------------|------|
| 37 | 188: 4: 5 | 31 8.7 N | 121 19.6 W | 10 | 36 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 18.992 | 33.433 | 18.992 | 23.827 | 0. | 2 |
| 10 | 18.988 | 33.445 | 18.986 | 23.838 | 0.41 | 1 |
| 20 | 18.385 | 33.441 | 18.382 | 23.986 | 0.81 | 1 |
| 30 | 18.106 | 33.447 | 18.101 | 24.059 | 1.20 | 1 |
| 40 | 15.956 | 33.450 | 15.950 | 24.568 | 1.56 | 1 |
| 50 | 15.189 | 33.379 | 15.181 | 24.684 | 1.90 | 1 |
| 60 | 14.668 | 33.338 | 14.659 | 24.765 | 2.22 | 1 |
| 70 | 14.327 | 33.341 | 14.317 | 24.840 | 2.54 | 1 |
| 80 | 13.728 | 33.305 | 13.717 | 24.936 | 2.85 | 1 |
| 90 | 13.384 | 33.322 | 13.372 | 25.020 | 3.15 | 1 |
| 100 | 13.220 | 33.370 | 13.206 | 25.090 | 3.45 | 1 |
| 125 | 12.149 | 33.426 | 12.133 | 25.342 | 4.14 | 1 |
| 150 | 10.688 | 33.625 | 10.670 | 25.764 | 4.76 | 1 |
| 175 | 9.705 | 33.731 | 9.685 | 26.014 | 5.30 | 1 |
| 200 | 8.930 | 33.843 | 8.909 | 26.227 | 5.78 | 1 |
| 225 | 8.462 | 33.949 | 8.439 | 26.383 | 6.22 | 1 |
| 250 | 8.000 | 34.004 | 7.975 | 26.496 | 6.63 | 1 |
| 300 | 7.286 | 34.047 | 7.257 | 26.633 | 7.39 | 1 |
| 400 | 6.406 | 34.165 | 6.370 | 26.846 | 8.75 | 1 |
| 500 | 5.938 | 34.265 | 5.894 | 26.985 | 9.95 | 4 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 38 | 188: 6:25 | 31 25.3 N | 121 23.9 W | 15 | 36 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 18.753 | 33.516 | 18.753 | 23.951 | 0. | 2 |
| 10 | 18.768 | 33.516 | 18.766 | 23.947 | 0.40 | 1 |
| 20 | 18.504 | 33.537 | 18.501 | 24.030 | 0.79 | 1 |
| 30 | 17.360 | 33.824 | 17.355 | 24.528 | 1.18 | 1 |
| 40 | 16.192 | 33.461 | 16.186 | 24.523 | 1.53 | 1 |
| 50 | 15.180 | 33.424 | 15.172 | 24.720 | 1.86 | 1 |
| 60 | 14.433 | 33.381 | 14.424 | 24.848 | 2.17 | 1 |
| 70 | 13.607 | 33.314 | 13.597 | 24.968 | 2.48 | 1 |
| 80 | 12.950 | 33.373 | 12.939 | 25.145 | 2.77 | 1 |
| 90 | 12.682 | 33.393 | 12.670 | 25.214 | 3.05 | 1 |
| 100 | 12.209 | 33.460 | 12.196 | 25.357 | 3.32 | 1 |
| 125 | 11.384 | 33.557 | 11.368 | 25.586 | 3.96 | 1 |
| 150 | 10.662 | 33.630 | 10.644 | 25.772 | 4.55 | 1 |
| 175 | 10.194 | 33.742 | 10.174 | 25.941 | 5.09 | 1 |
| 200 | 10.521 | 34.045 | 10.497 | 26.121 | 5.60 | 1 |
| 225 | 10.350 | 34.183 | 10.323 | 26.259 | 6.07 | 1 |
| 250 | 10.759 | 34.493 | 10.728 | 26.430 | 6.50 | 1 |
| 300 | 9.218 | 34.507 | 9.185 | 26.703 | 7.26 | 1 |
| 400 | 7.167 | 34.427 | 7.129 | 26.950 | 8.55 | 1 |
| 500 | 5.614 | 34.308 | 5.572 | 27.059 | 9.66 | 1 |

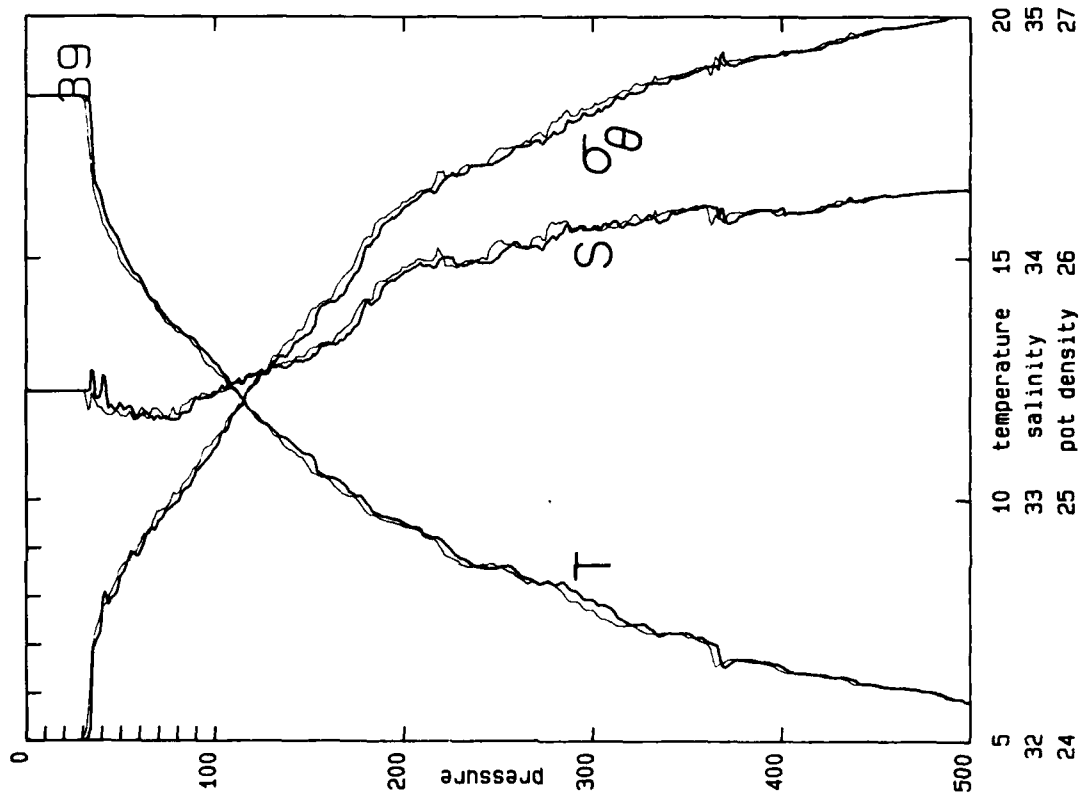
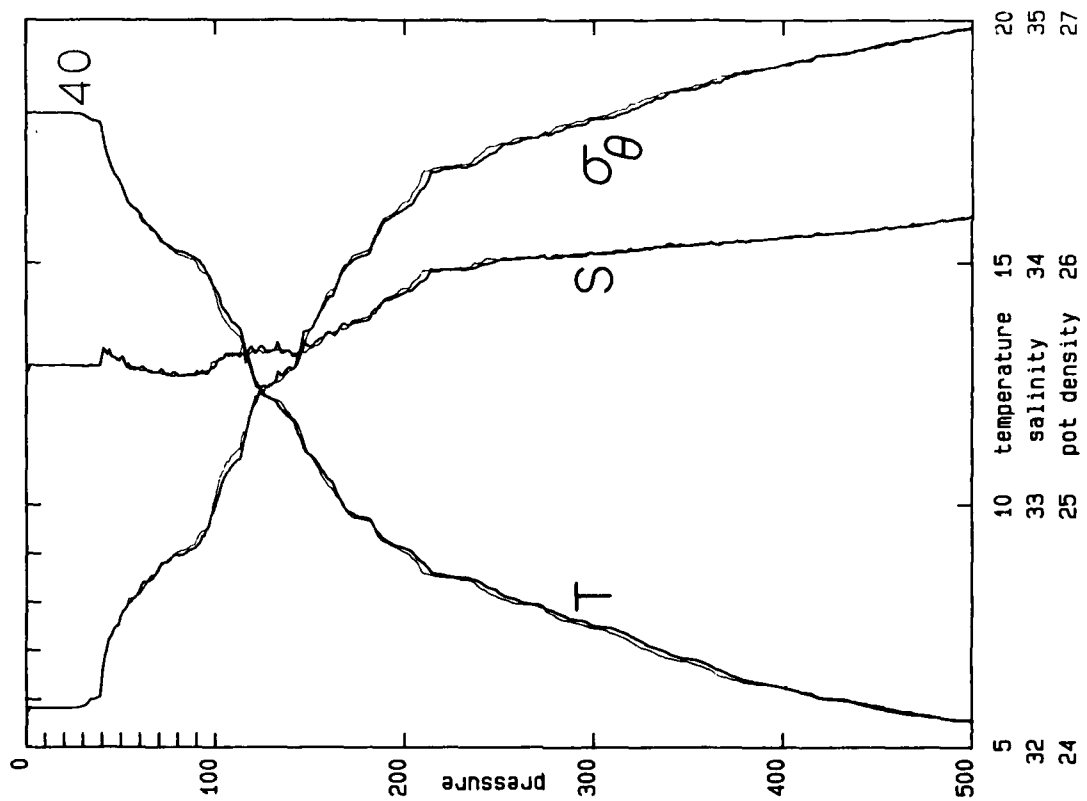


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 39 | 188: 8:50 | 31 43.1 N | 121 27.5 W | 17 | 4 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 18.339 | 33.454 | 18.339 | 24.006 | 0. | 2 |
| 10 | 18.361 | 33.449 | 18.359 | 23.997 | 0.39 | 1 |
| 20 | 18.356 | 33.448 | 18.353 | 23.998 | 0.79 | 1 |
| 30 | 18.336 | 33.448 | 18.331 | 24.004 | 1.18 | 1 |
| 40 | 16.245 | 33.450 | 16.239 | 24.502 | 1.55 | 1 |
| 50 | 15.245 | 33.400 | 15.237 | 24.688 | 1.88 | 1 |
| 60 | 14.591 | 33.346 | 14.582 | 24.787 | 2.21 | 1 |
| 70 | 13.965 | 33.344 | 13.955 | 24.917 | 2.52 | 1 |
| 80 | 13.555 | 33.334 | 13.544 | 24.994 | 2.82 | 1 |
| 90 | 13.238 | 33.425 | 13.226 | 25.129 | 3.11 | 1 |
| 100 | 12.813 | 33.438 | 12.800 | 25.223 | 3.40 | 1 |
| 125 | 11.597 | 33.528 | 11.581 | 25.524 | 4.05 | 1 |
| 150 | 10.914 | 33.584 | 10.896 | 25.692 | 4.66 | 1 |
| 175 | 10.070 | 33.734 | 10.050 | 25.955 | 5.21 | 1 |
| 200 | 9.486 | 33.947 | 9.464 | 26.219 | 5.69 | 1 |
| 225 | 8.887 | 34.003 | 8.863 | 26.359 | 6.14 | 1 |
| 250 | 8.617 | 34.015 | 8.591 | 26.411 | 6.56 | 1 |
| 300 | 7.879 | 34.127 | 7.849 | 26.611 | 7.35 | 1 |
| 400 | 6.495 | 34.192 | 6.459 | 26.855 | 8.69 | 1 |
| 500 | 5.776 | 34.289 | 5.733 | 27.024 | 9.87 | 4 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|----------|--------------------------|----------------------|----------------------------|------|
| 40 | 188:11: 7 | 32 0.2 N | 121 31.1 W | 9 | 36 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 18.066 | 33.553 | 18.066 | 24.149 | 0. | 2 |
| 10 | 18.080 | 33.575 | 18.078 | 24.163 | 0.38 | 1 |
| 20 | 18.079 | 33.575 | 18.076 | 24.164 | 0.76 | 1 |
| 30 | 18.036 | 33.571 | 18.031 | 24.171 | 1.13 | 1 |
| 40 | 17.785 | 33.605 | 17.778 | 24.259 | 1.51 | 1 |
| 50 | 16.595 | 33.607 | 16.587 | 24.543 | 1.86 | 1 |
| 60 | 15.970 | 33.563 | 15.961 | 24.652 | 2.19 | 1 |
| 70 | 15.544 | 33.551 | 15.533 | 24.739 | 2.52 | 1 |
| 80 | 15.224 | 33.531 | 15.212 | 24.794 | 2.84 | 1 |
| 90 | 15.063 | 33.538 | 15.049 | 24.835 | 3.16 | 1 |
| 100 | 14.426 | 33.580 | 14.411 | 25.004 | 3.47 | 1 |
| 125 | 12.252 | 33.652 | 12.236 | 25.498 | 4.16 | 1 |
| 150 | 11.016 | 33.654 | 10.998 | 25.728 | 4.77 | 1 |
| 175 | 9.749 | 33.753 | 9.729 | 26.024 | 5.30 | 1 |
| 200 | 9.088 | 33.881 | 9.066 | 26.232 | 5.78 | 1 |
| 225 | 8.505 | 33.971 | 8.481 | 26.394 | 6.22 | 1 |
| 250 | 8.149 | 34.012 | 8.124 | 26.480 | 6.63 | 1 |
| 300 | 7.493 | 34.037 | 7.464 | 26.596 | 7.40 | 1 |
| 400 | 6.213 | 34.107 | 6.178 | 26.825 | 8.79 | 1 |
| 500 | 5.544 | 34.191 | 5.502 | 26.975 | 10.00 | 1 |

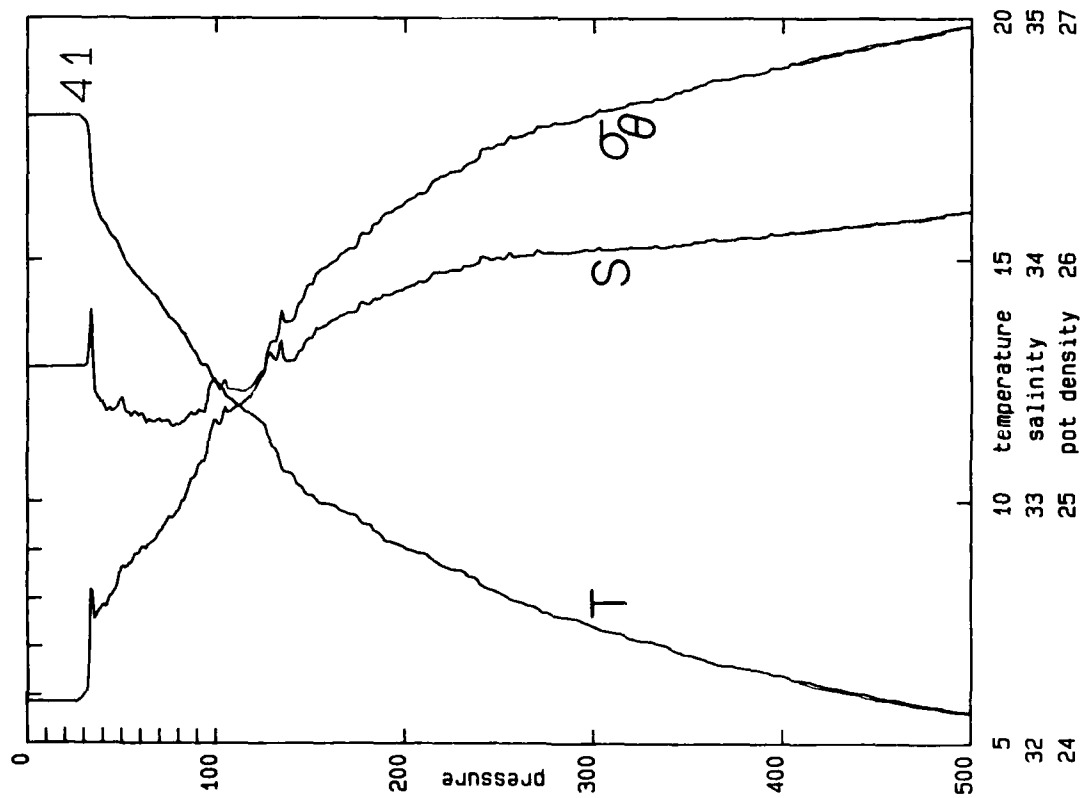
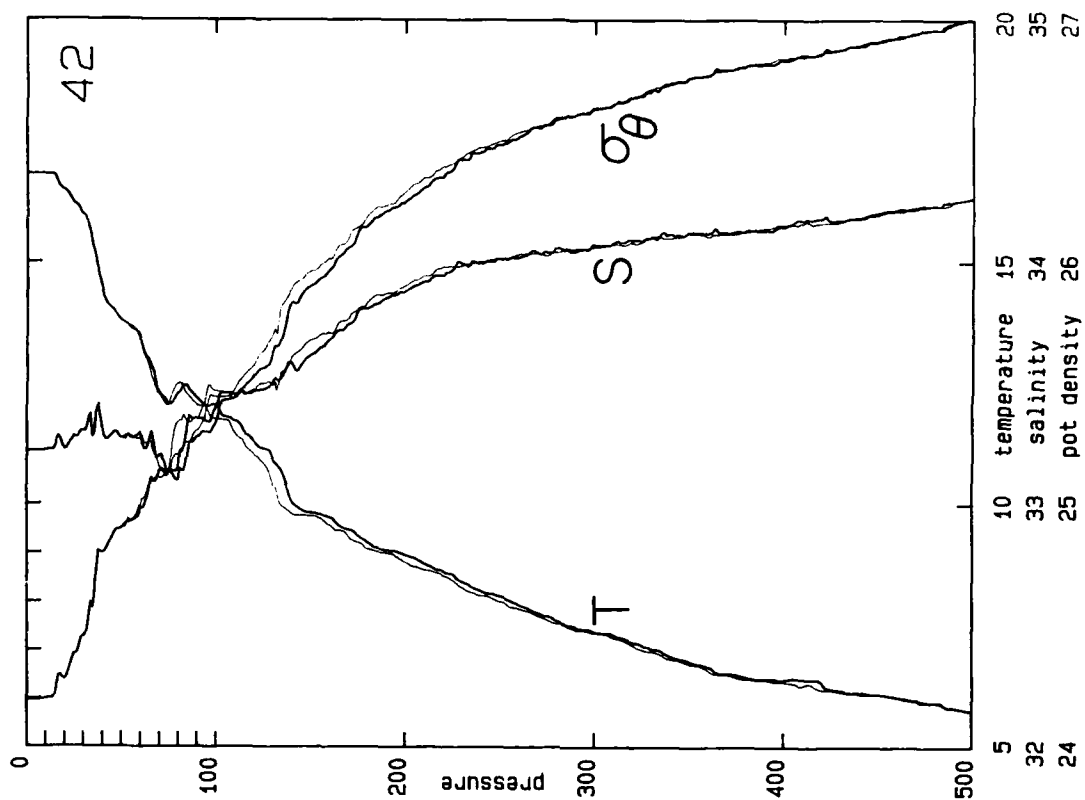


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 41 | 188:13:42 | 32 16.3 N | 121 35.7 W | 16 | 1 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 17.976 | 33.557 | 17.976 | 24.174 | 0. | 2 |
| 10 | 17.983 | 33.557 | 17.981 | 24.173 | 0.38 | 1 |
| 20 | 17.988 | 33.556 | 17.985 | 24.171 | 0.75 | 1 |
| 30 | 17.896 | 33.561 | 17.891 | 24.198 | 1.13 | 1 |
| 40 | 15.789 | 33.411 | 15.783 | 24.575 | 1.48 | 1 |
| 50 | 15.136 | 33.427 | 15.128 | 24.732 | 1.81 | 1 |
| 60 | 14.561 | 33.364 | 14.552 | 24.808 | 2.13 | 1 |
| 70 | 14.112 | 33.337 | 14.102 | 24.882 | 2.45 | 1 |
| 80 | 13.613 | 33.313 | 13.602 | 24.966 | 2.75 | 1 |
| 90 | 12.994 | 33.372 | 12.982 | 25.136 | 3.04 | 1 |
| 100 | 12.453 | 33.488 | 12.440 | 25.332 | 3.32 | 1 |
| 125 | 11.603 | 33.538 | 11.587 | 25.531 | 3.97 | 1 |
| 150 | 10.119 | 33.674 | 10.102 | 25.900 | 4.54 | 1 |
| 175 | 9.624 | 33.816 | 9.604 | 26.094 | 5.05 | 1 |
| 200 | 9.010 | 33.886 | 8.988 | 26.248 | 5.52 | 1 |
| 225 | 8.588 | 33.954 | 8.564 | 26.367 | 5.96 | 1 |
| 250 | 8.089 | 34.001 | 8.064 | 26.480 | 6.37 | 1 |
| 300 | 7.390 | 34.048 | 7.361 | 26.619 | 7.14 | 1 |
| 400 | 6.371 | 34.107 | 6.335 | 26.804 | 8.52 | 1 |
| 500 | 5.623 | 34.203 | 5.581 | 26.975 | 9.74 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 42 | 188:15:56 | 32 33.4 N | 121 38.7 W | 14 | 3 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 16.807 | 33.219 | 16.807 | 24.194 | 0. | 2 |
| 10 | 16.795 | 33.222 | 16.793 | 24.199 | 0.37 | 1 |
| 20 | 16.463 | 33.225 | 16.460 | 24.279 | 0.74 | 1 |
| 30 | 15.941 | 33.301 | 15.936 | 24.456 | 1.10 | 1 |
| 40 | 14.396 | 33.280 | 14.390 | 24.777 | 1.43 | 1 |
| 50 | 13.765 | 33.271 | 13.758 | 24.902 | 1.74 | 1 |
| 60 | 13.388 | 33.296 | 13.380 | 24.998 | 2.05 | 1 |
| 70 | 12.291 | 33.204 | 12.282 | 25.142 | 2.34 | 1 |
| 80 | 12.306 | 33.177 | 12.296 | 25.118 | 2.63 | 1 |
| 90 | 12.167 | 33.351 | 12.155 | 25.280 | 2.91 | 1 |
| 100 | 12.049 | 33.404 | 12.036 | 25.343 | 3.18 | 1 |
| 125 | 11.135 | 33.473 | 11.120 | 25.566 | 3.81 | 1 |
| 150 | 9.815 | 33.616 | 9.798 | 25.906 | 4.38 | 1 |
| 175 | 9.323 | 33.809 | 9.304 | 26.137 | 4.89 | 1 |
| 200 | 8.935 | 33.886 | 8.914 | 26.260 | 5.35 | 1 |
| 225 | 8.527 | 33.984 | 8.503 | 26.400 | 5.79 | 1 |
| 250 | 8.097 | 34.009 | 8.072 | 26.485 | 6.19 | 1 |
| 300 | 7.362 | 34.069 | 7.333 | 26.639 | 6.95 | 1 |
| 400 | 6.413 | 34.155 | 6.377 | 26.837 | 8.30 | 1 |
| 500 | 5.719 | 34.267 | 5.676 | 27.014 | 9.49 | 4 |

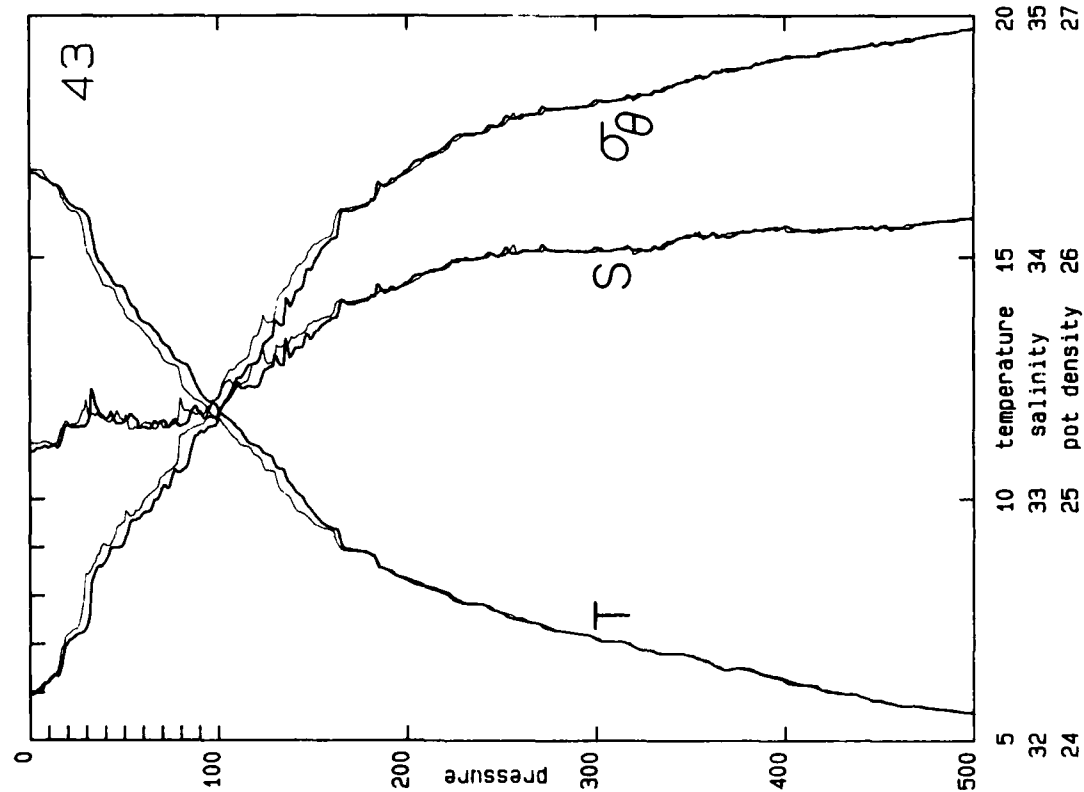
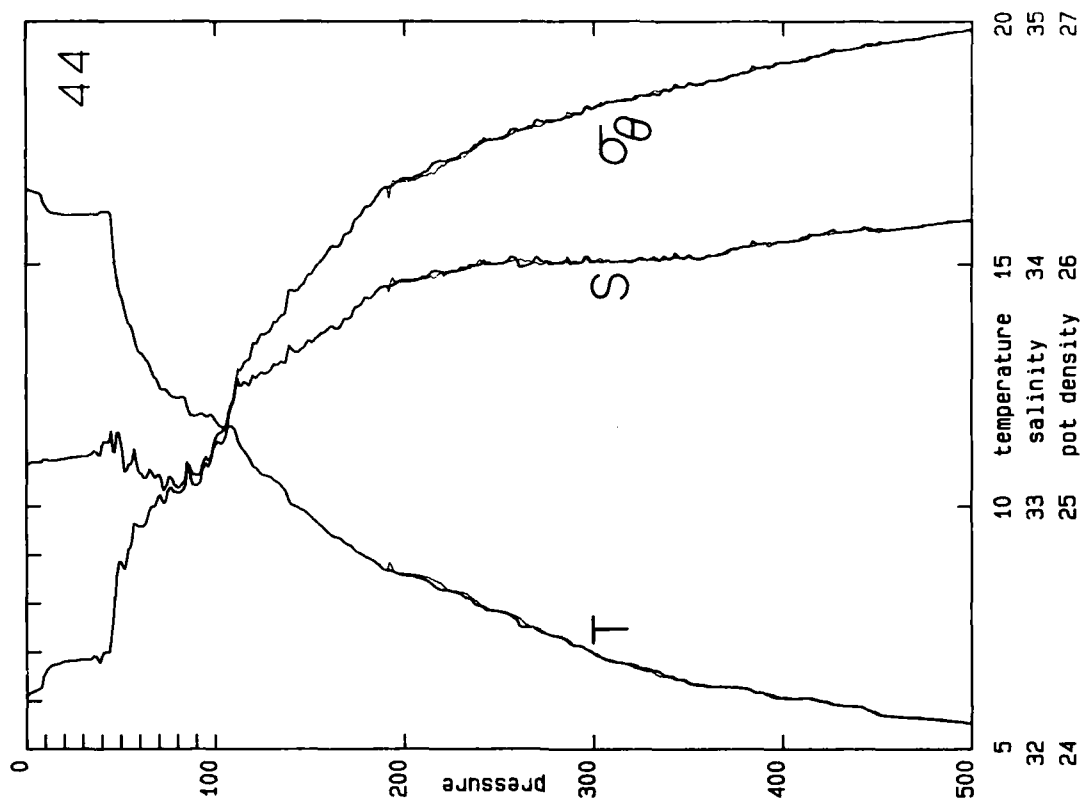


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 43 | 188:20:21 | 32 52.0 N | 121 42.7 W | 12 | 36 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 16.742 | 33.198 | 16.742 | 24.193 | 0. | 2 |
| 10 | 16.576 | 33.214 | 16.574 | 24.244 | 0.37 | 1 |
| 20 | 16.173 | 33.305 | 16.170 | 24.406 | 0.74 | 1 |
| 30 | 15.906 | 33.303 | 15.901 | 24.466 | 1.09 | 1 |
| 40 | 14.762 | 33.336 | 14.756 | 24.743 | 1.42 | 1 |
| 50 | 14.351 | 33.325 | 14.344 | 24.822 | 1.73 | 1 |
| 60 | 13.660 | 33.297 | 13.652 | 24.944 | 2.04 | 1 |
| 70 | 13.243 | 33.324 | 13.233 | 25.049 | 2.34 | 1 |
| 80 | 12.815 | 33.301 | 12.804 | 25.116 | 2.63 | 1 |
| 90 | 12.197 | 33.359 | 12.185 | 25.280 | 2.91 | 1 |
| 100 | 11.813 | 33.366 | 11.800 | 25.358 | 3.18 | 1 |
| 125 | 10.917 | 33.536 | 10.902 | 25.653 | 3.81 | 1 |
| 150 | 9.690 | 33.678 | 9.673 | 25.975 | 4.36 | 1 |
| 175 | 8.903 | 33.815 | 8.884 | 26.209 | 4.85 | 1 |
| 200 | 8.292 | 33.899 | 8.271 | 26.369 | 5.29 | 1 |
| 225 | 7.861 | 33.988 | 7.839 | 26.503 | 5.70 | 1 |
| 250 | 7.612 | 34.023 | 7.588 | 26.567 | 6.08 | 1 |
| 300 | 7.064 | 34.032 | 7.036 | 26.652 | 6.82 | 1 |
| 400 | 6.232 | 34.124 | 6.197 | 26.836 | 8.18 | 1 |
| 500 | 5.555 | 34.165 | 5.513 | 26.953 | 9.41 | 4 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|----------|--------------------------|----------------------|----------------------------|------|
| 44 | 189: 0:25 | 33 9.6 N | 121 47.2 W | 10 | 2 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 16.527 | 33.175 | 16.527 | 24.225 | 0. | 2 |
| 10 | 16.185 | 33.194 | 16.183 | 24.318 | 0.37 | 1 |
| 20 | 15.999 | 33.196 | 15.996 | 24.362 | 0.73 | 1 |
| 30 | 16.005 | 33.207 | 16.000 | 24.370 | 1.09 | 1 |
| 40 | 16.079 | 33.255 | 16.073 | 24.390 | 1.44 | 1 |
| 50 | 14.348 | 33.252 | 14.341 | 24.766 | 1.79 | 1 |
| 60 | 13.160 | 33.134 | 13.152 | 24.918 | 2.10 | 1 |
| 70 | 12.490 | 33.122 | 12.481 | 25.040 | 2.40 | 1 |
| 80 | 12.221 | 33.074 | 12.211 | 25.054 | 2.69 | 1 |
| 90 | 11.870 | 33.085 | 11.859 | 25.129 | 2.98 | 1 |
| 100 | 11.748 | 33.266 | 11.735 | 25.292 | 3.26 | 1 |
| 125 | 10.636 | 33.546 | 10.621 | 25.711 | 3.88 | 1 |
| 150 | 9.778 | 33.677 | 9.761 | 25.959 | 4.43 | 1 |
| 175 | 9.035 | 33.825 | 9.016 | 26.196 | 4.93 | 1 |
| 200 | 8.565 | 33.930 | 8.544 | 26.352 | 5.37 | 1 |
| 225 | 8.225 | 33.970 | 8.202 | 26.435 | 5.79 | 1 |
| 250 | 7.813 | 34.001 | 7.788 | 26.521 | 6.18 | 1 |
| 300 | 6.922 | 34.010 | 6.894 | 26.653 | 6.93 | 1 |
| 400 | 6.062 | 34.091 | 6.027 | 26.831 | 8.28 | 1 |
| 500 | 5.505 | 34.183 | 5.463 | 26.973 | 9.49 | 4 |

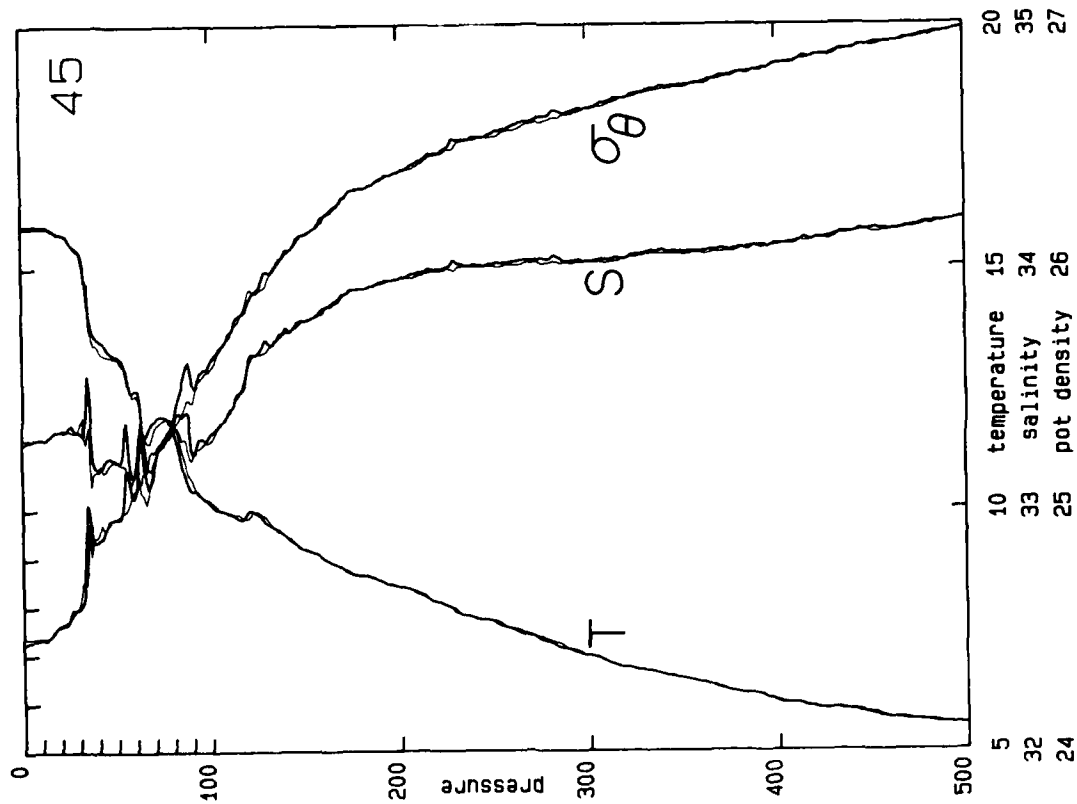
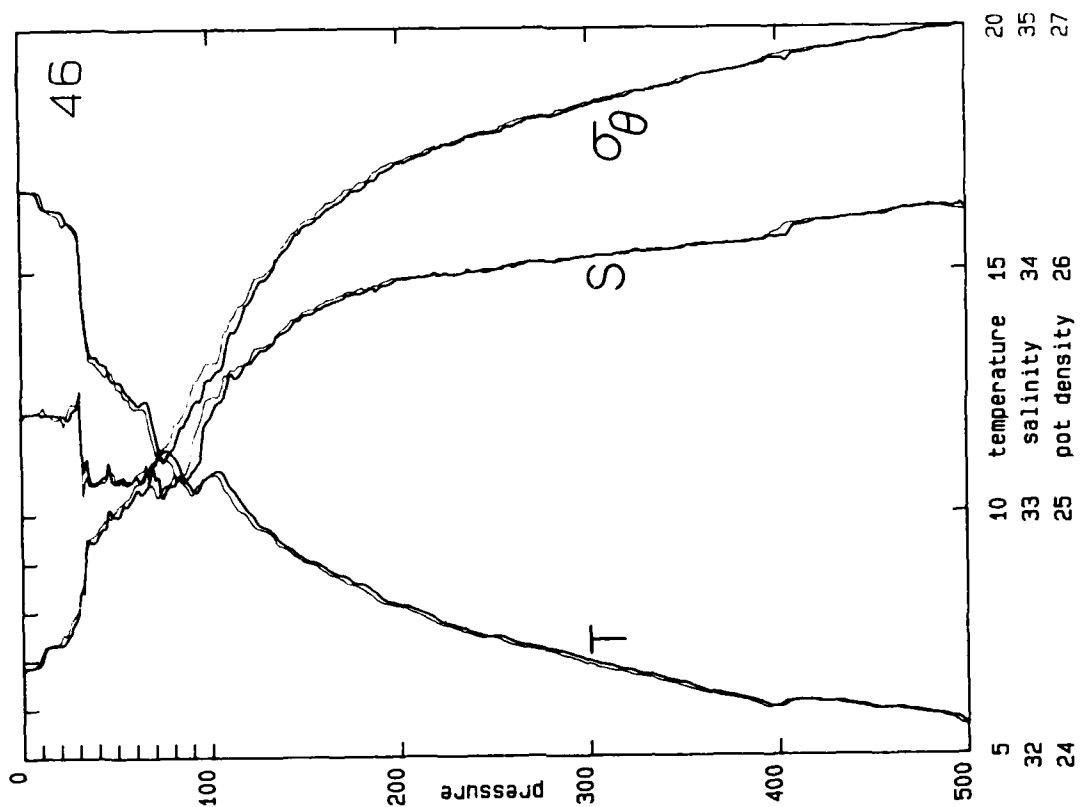


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 45 | 189: 2:28 | 33 24.1 N | 121 49.9 W | 12 | 36 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 15.888 | 33.275 | 15.888 | 24.447 | 0. | 2 |
| 10 | 15.868 | 33.295 | 15.866 | 24.467 | 0.35 | 1 |
| 20 | 15.723 | 33.326 | 15.720 | 24.524 | 0.69 | 1 |
| 30 | 15.377 | 33.321 | 15.372 | 24.597 | 1.03 | 1 |
| 40 | 13.525 | 33.168 | 13.519 | 24.871 | 1.35 | 1 |
| 50 | 13.187 | 33.204 | 13.180 | 24.967 | 1.65 | 1 |
| 60 | 12.506 | 33.167 | 12.498 | 25.072 | 1.94 | 1 |
| 70 | 11.881 | 33.186 | 11.872 | 25.205 | 2.22 | 1 |
| 80 | 11.648 | 33.374 | 11.638 | 25.394 | 2.49 | 1 |
| 90 | 10.397 | 33.243 | 10.387 | 25.515 | 2.74 | 1 |
| 100 | 10.092 | 33.318 | 10.081 | 25.626 | 2.98 | 1 |
| 125 | 9.887 | 33.650 | 9.873 | 25.920 | 3.55 | 1 |
| 150 | 9.162 | 33.780 | 9.146 | 26.140 | 4.05 | 1 |
| 175 | 8.647 | 33.910 | 8.629 | 26.323 | 4.50 | 1 |
| 200 | 8.375 | 33.956 | 8.354 | 26.401 | 4.93 | 1 |
| 225 | 7.974 | 34.001 | 7.951 | 26.497 | 5.33 | 1 |
| 250 | 7.606 | 34.013 | 7.582 | 26.560 | 5.72 | 1 |
| 300 | 6.944 | 34.021 | 6.916 | 26.659 | 6.45 | 1 |
| 400 | 5.983 | 34.091 | 5.948 | 26.841 | 7.79 | 1 |
| 500 | 5.506 | 34.199 | 5.464 | 26.986 | 8.99 | 4 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 46 | 189: 4:49 | 33 29.4 N | 121 30.9 W | 15 | 2 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 16.691 | 33.406 | 16.691 | 24.364 | 0. | 2 |
| 10 | 16.511 | 33.423 | 16.509 | 24.419 | 0.36 | 1 |
| 20 | 16.261 | 33.411 | 16.258 | 24.468 | 0.71 | 1 |
| 30 | 15.856 | 33.458 | 15.851 | 24.596 | 1.05 | 1 |
| 40 | 13.238 | 33.137 | 13.233 | 24.904 | 1.36 | 1 |
| 50 | 12.760 | 33.131 | 12.753 | 24.994 | 1.66 | 1 |
| 60 | 12.350 | 33.157 | 12.342 | 25.094 | 1.96 | 1 |
| 70 | 11.784 | 33.185 | 11.775 | 25.222 | 2.24 | 1 |
| 80 | 11.220 | 33.122 | 11.210 | 25.276 | 2.52 | 1 |
| 90 | 10.530 | 33.177 | 10.519 | 25.441 | 2.78 | 1 |
| 100 | 10.849 | 33.406 | 10.837 | 25.564 | 3.03 | 1 |
| 125 | 9.784 | 33.679 | 9.770 | 25.959 | 3.60 | 1 |
| 150 | 9.050 | 33.824 | 9.034 | 26.192 | 4.09 | 1 |
| 175 | 8.569 | 33.906 | 8.551 | 26.332 | 4.54 | 1 |
| 200 | 8.112 | 33.965 | 8.092 | 26.448 | 4.96 | 1 |
| 225 | 7.711 | 33.985 | 7.689 | 26.522 | 5.35 | 1 |
| 250 | 7.471 | 34.005 | 7.447 | 26.573 | 5.74 | 1 |
| 300 | 6.937 | 34.056 | 6.909 | 26.688 | 6.46 | 1 |
| 400 | 6.018 | 34.134 | 5.983 | 26.871 | 7.78 | 1 |
| 500 | 5.576 | 34.240 | 5.534 | 27.010 | 8.95 | 1 |

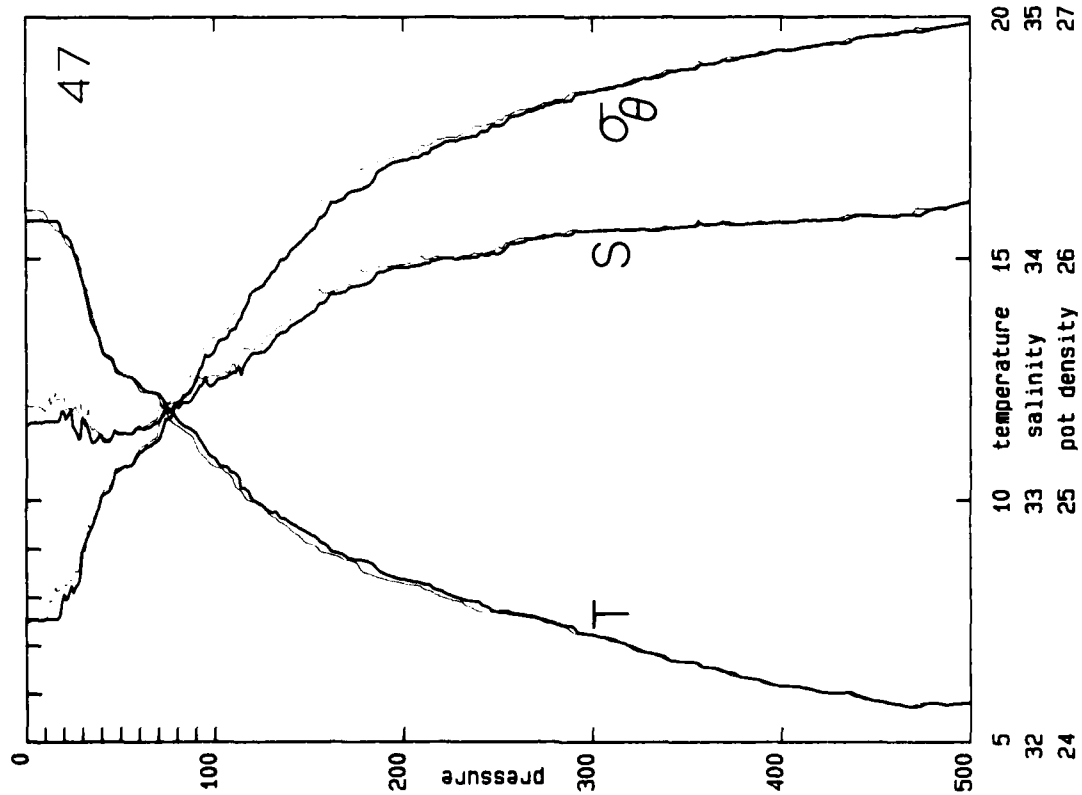
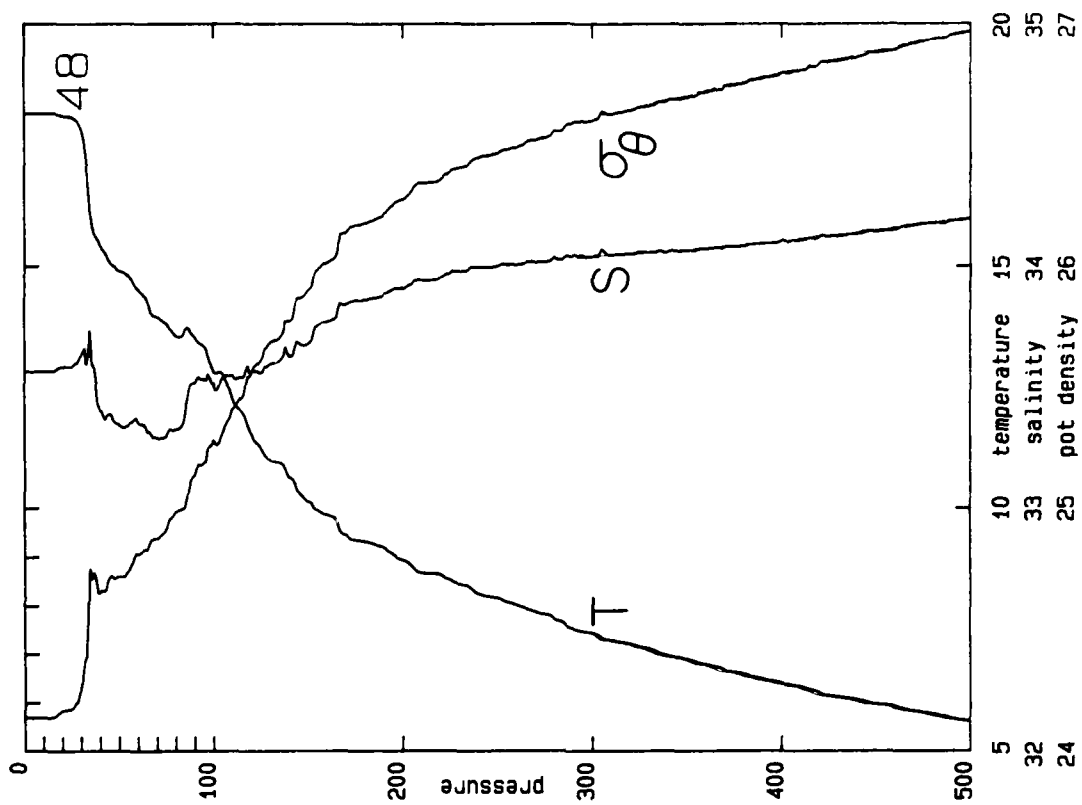


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--|-------------------------------------|---|------|
| 47 | 189: 8:43 | 32 56.9 N | 121 22.0 W | 14 | 4 | |
| depth | temperature | salinity | potential temperature (degree C) | sigma-theta (kg/m ³) | geopotential anomaly (m/s) ² | flag |
| (m) | (degree C) | | | | | |
| 0 | 15.784 | 33.313 | 15.784 | 24.500 | 0. | 2 |
| 10 | 15.786 | 33.329 | 15.784 | 24.512 | 0.34 | 1 |
| 20 | 15.473 | 33.365 | 15.470 | 24.610 | 0.69 | 1 |
| 30 | 14.518 | 33.341 | 14.514 | 24.798 | 1.02 | 1 |
| 40 | 13.151 | 33.265 | 13.146 | 25.021 | 1.32 | 1 |
| 50 | 12.623 | 33.278 | 12.616 | 25.135 | 1.61 | 1 |
| 60 | 12.382 | 33.308 | 12.374 | 25.205 | 1.90 | 1 |
| 70 | 12.187 | 33.326 | 12.178 | 25.256 | 2.17 | 1 |
| 80 | 11.658 | 33.385 | 11.648 | 25.401 | 2.44 | 1 |
| 90 | 11.369 | 33.453 | 11.358 | 25.507 | 2.69 | 1 |
| 100 | 10.849 | 33.493 | 10.837 | 25.631 | 2.94 | 1 |
| 125 | 9.879 | 33.611 | 9.865 | 25.890 | 3.50 | 1 |
| 150 | 9.286 | 33.772 | 9.270 | 26.114 | 4.01 | 1 |
| 175 | 8.760 | 33.887 | 8.741 | 26.287 | 4.47 | 1 |
| 200 | 8.346 | 33.963 | 8.325 | 26.411 | 4.89 | 1 |
| 225 | 8.007 | 33.999 | 7.984 | 26.490 | 5.30 | 1 |
| 250 | 7.708 | 34.024 | 7.683 | 26.554 | 5.69 | 1 |
| 300 | 7.204 | 34.115 | 7.175 | 26.698 | 6.41 | 1 |
| 400 | 6.160 | 34.151 | 6.125 | 26.866 | 7.73 | 1 |
| 500 | 5.842 | 34.240 | 5.799 | 26.977 | 8.92 | 4 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--|-------------------------------------|---|------|
| 48 | 189:13: 6 | 32 21.1 N | 121 16.4 W | 19 | 2 | |
| depth | temperature | salinity | potential temperature (degree C) | sigma-theta (kg/m ³) | geopotential anomaly (m/s) ² | flag |
| (m) | (degree C) | | | | | |
| 0 | 18.144 | 33.567 | 18.144 | 24.141 | 0. | 2 |
| 10 | 18.152 | 33.564 | 18.150 | 24.137 | 0.38 | 1 |
| 20 | 18.094 | 33.587 | 18.091 | 24.169 | 0.76 | 1 |
| 30 | 17.832 | 33.632 | 17.827 | 24.268 | 1.13 | 1 |
| 40 | 15.406 | 33.389 | 15.400 | 24.643 | 1.47 | 1 |
| 50 | 14.887 | 33.343 | 14.880 | 24.721 | 1.80 | 1 |
| 60 | 14.503 | 33.351 | 14.494 | 24.810 | 2.12 | 1 |
| 70 | 13.948 | 33.290 | 13.938 | 24.879 | 2.43 | 1 |
| 80 | 13.551 | 33.328 | 13.540 | 24.990 | 2.74 | 1 |
| 90 | 13.517 | 33.523 | 13.504 | 25.148 | 3.03 | 1 |
| 100 | 12.822 | 33.494 | 12.809 | 25.265 | 3.31 | 1 |
| 125 | 11.218 | 33.561 | 11.203 | 25.619 | 3.95 | 1 |
| 150 | 10.125 | 33.686 | 10.108 | 25.908 | 4.52 | 1 |
| 175 | 9.340 | 33.857 | 9.321 | 26.172 | 5.01 | 1 |
| 200 | 8.916 | 33.910 | 8.895 | 26.281 | 5.47 | 1 |
| 225 | 8.495 | 33.981 | 8.472 | 26.403 | 5.90 | 1 |
| 250 | 8.137 | 34.006 | 8.112 | 26.477 | 6.31 | 1 |
| 300 | 7.413 | 34.045 | 7.384 | 26.613 | 7.08 | 1 |
| 400 | 6.381 | 34.100 | 6.345 | 26.797 | 8.47 | 1 |
| 500 | 5.596 | 34.196 | 5.554 | 26.973 | 9.70 | 1 |

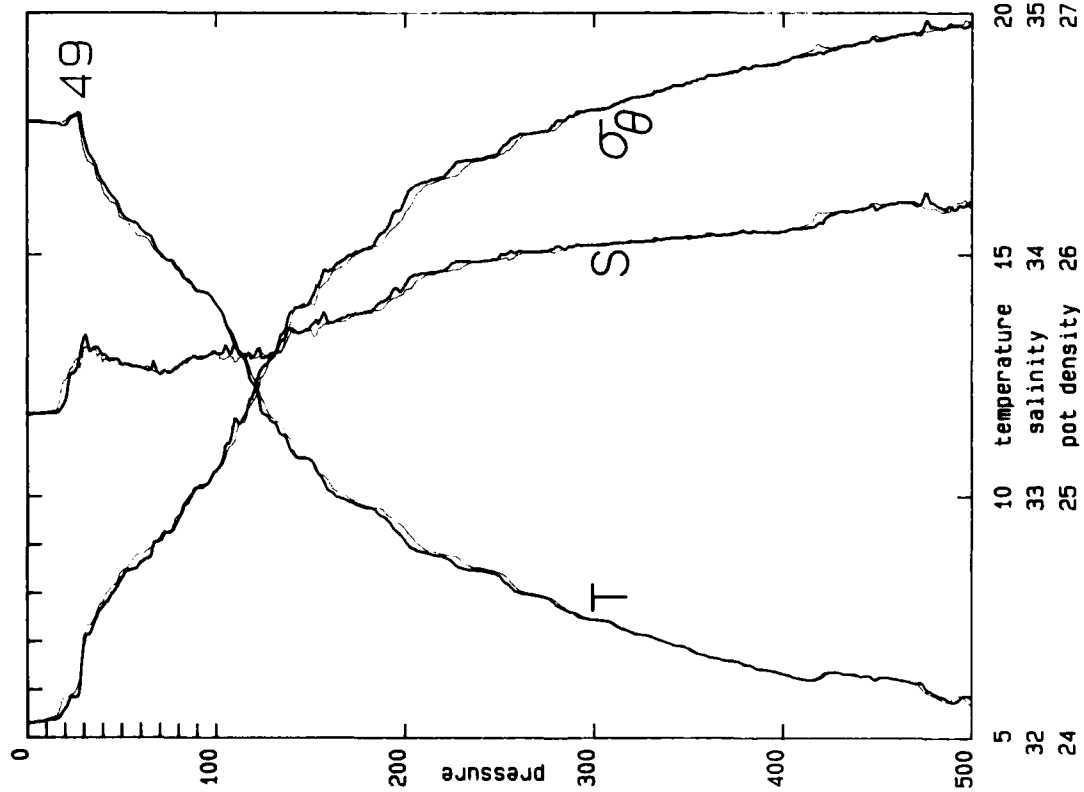
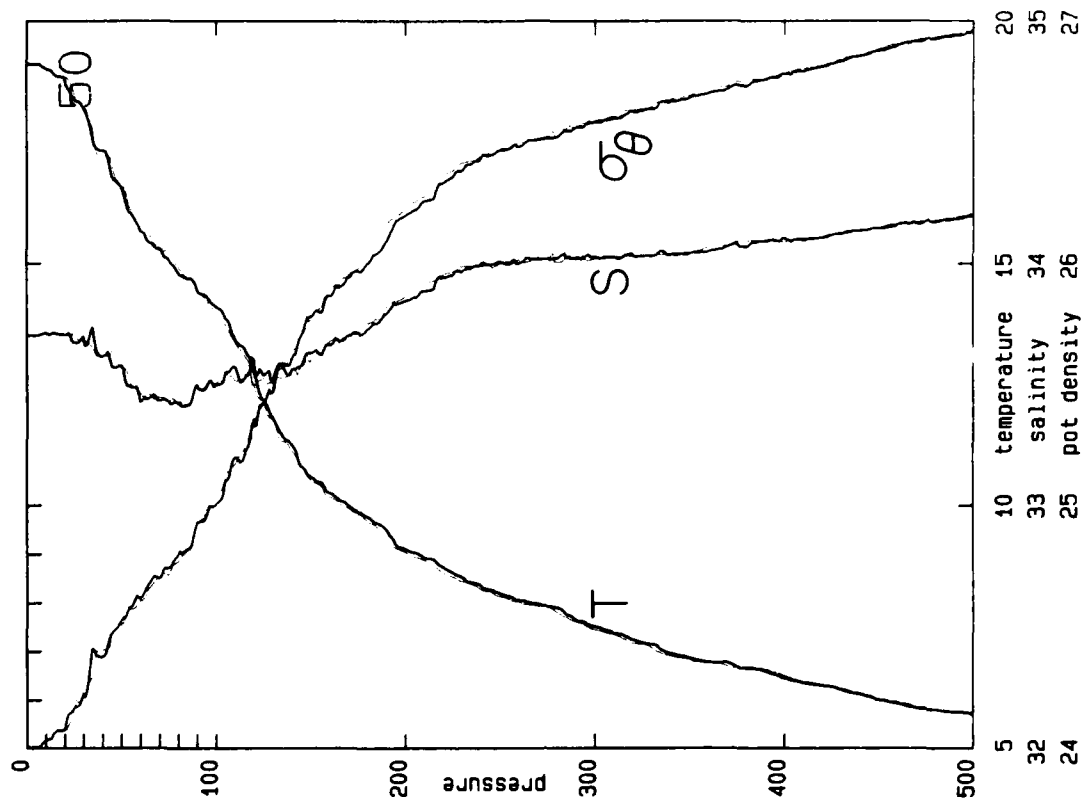


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 49 | 189:17:20 | 31 47.4 N | 121 8.1 W | 12 | 1 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 17.752 | 33.339 | 17.752 | 24.062 | 0. | 2 |
| 10 | 17.723 | 33.344 | 17.721 | 24.073 | 0.39 | 1 |
| 20 | 17.669 | 33.391 | 17.666 | 24.122 | 0.77 | 1 |
| 30 | 17.416 | 33.656 | 17.411 | 24.386 | 1.15 | 1 |
| 40 | 16.499 | 33.583 | 16.493 | 24.546 | 1.49 | 1 |
| 50 | 15.847 | 33.540 | 15.839 | 24.662 | 1.83 | 1 |
| 60 | 15.520 | 33.532 | 15.511 | 24.729 | 2.16 | 1 |
| 70 | 15.005 | 33.504 | 14.994 | 24.821 | 2.48 | 1 |
| 80 | 14.696 | 33.539 | 14.684 | 24.915 | 2.79 | 1 |
| 90 | 14.232 | 33.571 | 14.219 | 25.038 | 3.09 | 1 |
| 100 | 13.941 | 33.591 | 13.927 | 25.114 | 3.38 | 1 |
| 125 | 11.694 | 33.574 | 11.678 | 25.542 | 4.05 | 1 |
| 150 | 10.717 | 33.702 | 10.699 | 25.819 | 4.63 | 1 |
| 175 | 9.809 | 33.756 | 9.789 | 26.016 | 5.16 | 1 |
| 200 | 9.015 | 33.885 | 8.993 | 26.246 | 5.64 | 1 |
| 225 | 8.600 | 33.967 | 8.576 | 26.376 | 6.08 | 1 |
| 250 | 8.303 | 34.004 | 8.277 | 26.450 | 6.50 | 1 |
| 300 | 7.441 | 34.040 | 7.412 | 26.605 | 7.27 | 1 |
| 400 | 6.304 | 34.101 | 6.268 | 26.808 | 8.66 | 1 |
| 500 | 5.698 | 34.200 | 5.655 | 26.963 | 9.88 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 50 | 189:22:25 | 31 12.0 N | 121 0. W | 13 | 36 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 19.109 | 33.703 | 19.109 | 24.004 | 0. | 3 |
| 10 | 19.018 | 33.716 | 19.016 | 24.037 | 0.39 | 3 |
| 20 | 18.824 | 33.705 | 18.820 | 24.078 | 0.78 | 3 |
| 30 | 18.200 | 33.694 | 18.195 | 24.225 | 1.16 | 1 |
| 40 | 17.316 | 33.616 | 17.309 | 24.380 | 1.52 | 1 |
| 50 | 16.547 | 33.576 | 16.539 | 24.530 | 1.87 | 1 |
| 60 | 15.671 | 33.438 | 15.662 | 24.623 | 2.20 | 1 |
| 70 | 15.294 | 33.431 | 15.283 | 24.701 | 2.53 | 1 |
| 80 | 14.787 | 33.419 | 14.775 | 24.803 | 2.86 | 1 |
| 90 | 14.434 | 33.489 | 14.421 | 24.932 | 3.17 | 1 |
| 100 | 14.087 | 33.503 | 14.073 | 25.016 | 3.47 | 1 |
| 125 | 12.153 | 33.541 | 12.137 | 25.431 | 4.17 | 1 |
| 150 | 10.582 | 33.628 | 10.564 | 25.785 | 4.77 | 1 |
| 175 | 9.858 | 33.706 | 9.838 | 25.969 | 5.31 | 1 |
| 200 | 9.086 | 33.849 | 9.064 | 26.207 | 5.80 | 1 |
| 225 | 8.594 | 33.962 | 8.570 | 26.373 | 6.25 | 1 |
| 250 | 8.169 | 34.005 | 8.143 | 26.471 | 6.66 | 1 |
| 300 | 7.491 | 34.022 | 7.462 | 26.584 | 7.44 | 1 |
| 400 | 6.451 | 34.094 | 6.415 | 26.784 | 8.85 | 1 |
| 500 | 5.681 | 34.205 | 5.638 | 26.969 | 10.08 | 1 |

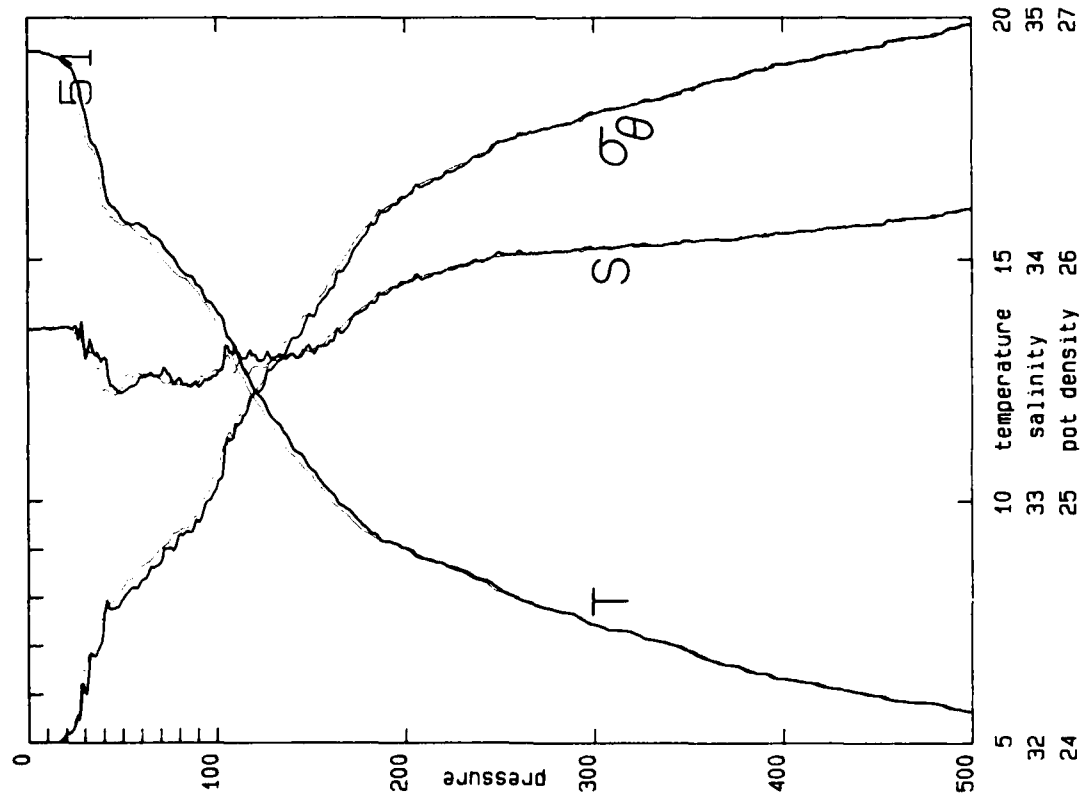
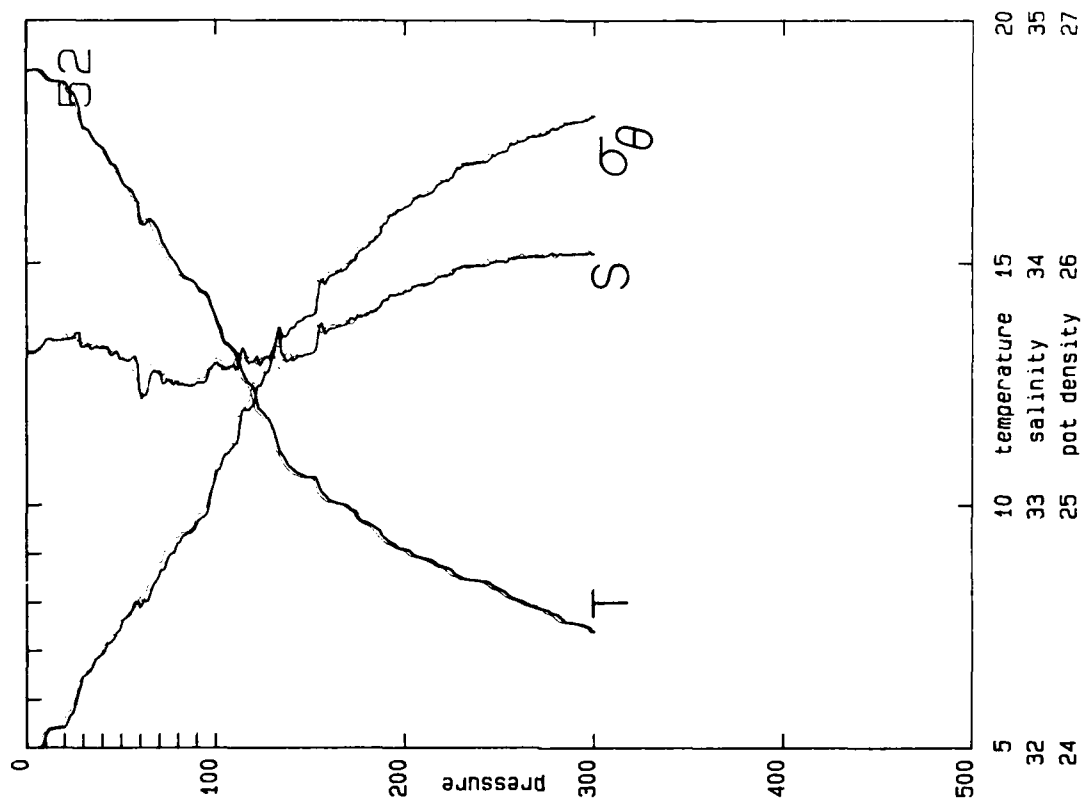


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 51 | 190: 1:43 | 31 19.4 N | 120 52.7 W | 12 | 36 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 19.312 | 33.710 | 19.312 | 23.957 | 0. | 2 |
| 10 | 19.249 | 33.713 | 19.247 | 23.976 | 0.40 | 1 |
| 20 | 19.041 | 33.721 | 19.037 | 24.036 | 0.79 | 1 |
| 30 | 18.111 | 33.645 | 18.106 | 24.210 | 1.17 | 1 |
| 40 | 16.817 | 33.592 | 16.810 | 24.479 | 1.53 | 1 |
| 50 | 15.832 | 33.453 | 15.824 | 24.598 | 1.87 | 1 |
| 60 | 15.699 | 33.514 | 15.690 | 24.675 | 2.20 | 1 |
| 70 | 15.376 | 33.519 | 15.365 | 24.751 | 2.53 | 1 |
| 80 | 14.812 | 33.508 | 14.800 | 24.866 | 2.85 | 1 |
| 90 | 14.446 | 33.474 | 14.433 | 24.918 | 3.16 | 1 |
| 100 | 13.902 | 33.541 | 13.888 | 25.084 | 3.46 | 1 |
| 125 | 12.045 | 33.586 | 12.029 | 25.486 | 4.13 | 1 |
| 150 | 10.649 | 33.622 | 10.631 | 25.768 | 4.72 | 1 |
| 175 | 9.574 | 33.779 | 9.554 | 26.073 | 5.26 | 1 |
| 200 | 9.010 | 33.905 | 8.988 | 26.263 | 5.72 | 1 |
| 225 | 8.613 | 33.961 | 8.589 | 26.369 | 6.16 | 1 |
| 250 | 8.125 | 34.020 | 8.100 | 26.490 | 6.57 | 1 |
| 300 | 7.424 | 34.046 | 7.395 | 26.613 | 7.34 | 1 |
| 400 | 6.315 | 34.110 | 6.279 | 26.814 | 8.72 | 1 |
| 500 | 5.642 | 34.208 | 5.600 | 26.977 | 9.95 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 52 | 190: 3:28 | 31 28.8 N | 120 45.5 W | 9 | 1 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 18.967 | 33.629 | 18.967 | 23.983 | 0. | 2 |
| 10 | 18.872 | 33.679 | 18.870 | 24.046 | 0.39 | 1 |
| 20 | 18.719 | 33.683 | 18.715 | 24.088 | 0.78 | 1 |
| 30 | 17.816 | 33.640 | 17.811 | 24.278 | 1.16 | 1 |
| 40 | 17.378 | 33.649 | 17.371 | 24.391 | 1.52 | 1 |
| 50 | 16.716 | 33.608 | 16.708 | 24.515 | 1.87 | 1 |
| 60 | 15.920 | 33.448 | 15.911 | 24.575 | 2.21 | 1 |
| 70 | 15.639 | 33.554 | 15.628 | 24.720 | 2.54 | 1 |
| 80 | 14.902 | 33.512 | 14.890 | 24.849 | 2.86 | 1 |
| 90 | 14.516 | 33.505 | 14.503 | 24.927 | 3.17 | 1 |
| 100 | 13.843 | 33.585 | 13.829 | 25.130 | 3.47 | 1 |
| 125 | 11.915 | 33.602 | 11.899 | 25.523 | 4.14 | 1 |
| 150 | 10.571 | 33.627 | 10.553 | 25.786 | 4.72 | 1 |
| 175 | 9.723 | 33.795 | 9.703 | 26.061 | 5.24 | 1 |
| 200 | 9.078 | 33.885 | 9.056 | 26.236 | 5.72 | 1 |
| 225 | 8.595 | 33.964 | 8.571 | 26.374 | 6.16 | 1 |
| 250 | 8.247 | 34.007 | 8.221 | 26.461 | 6.58 | 1 |
| 300 | 7.384 | 34.042 | 7.355 | 26.615 | 7.35 | 1 |

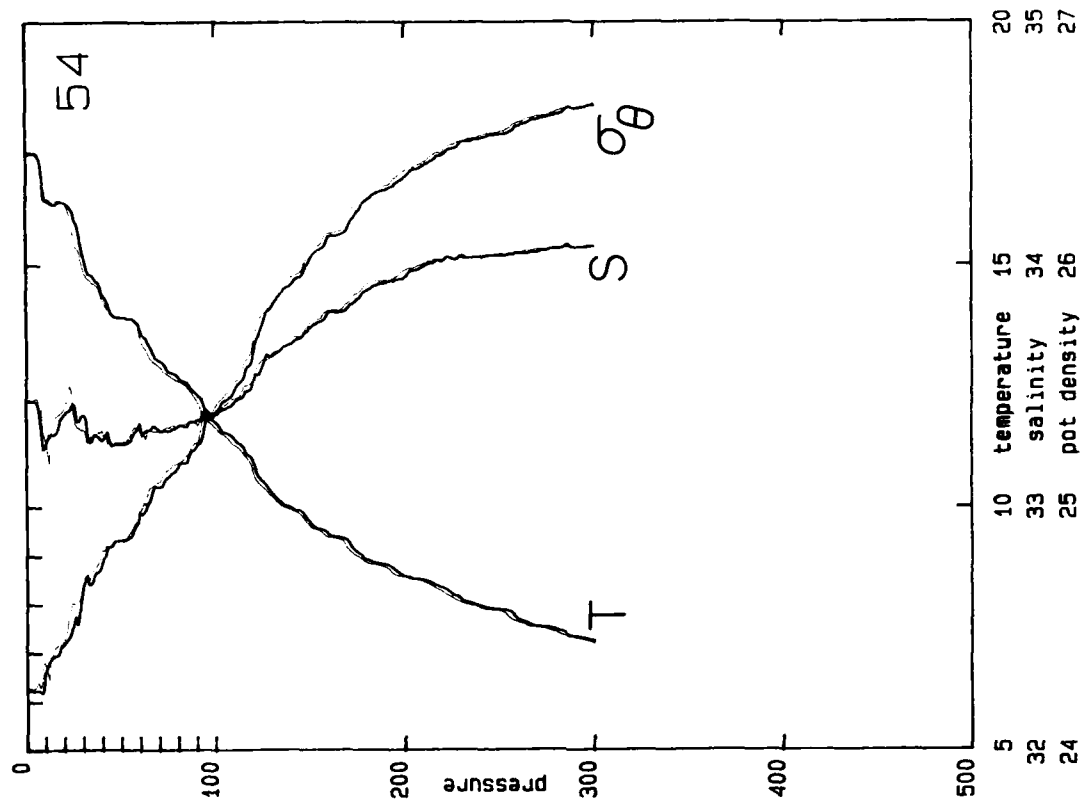
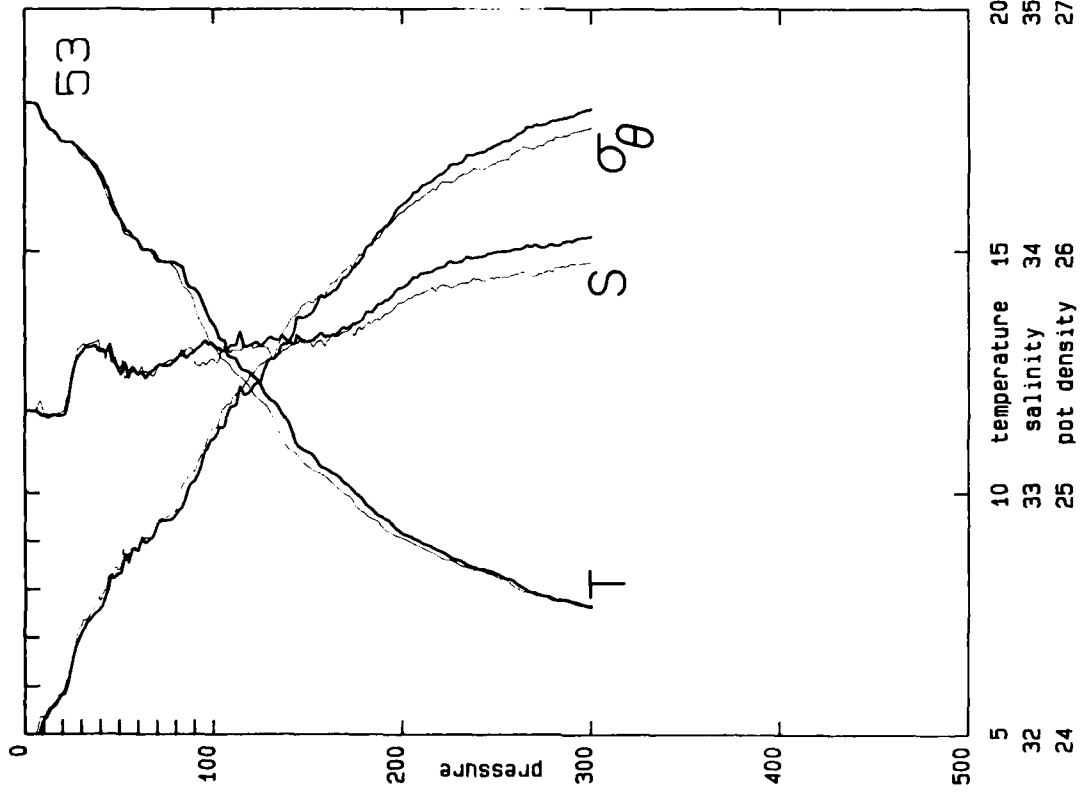


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--|-------------------------------------|---|------|
| 53 | 190: 4:44 | 31 35.5 N | 120 39.6 W | 11 | 1 | |
| depth | temperature | salinity | potential temperature (degree C) | sigma-theta (kg/m ³) | geopotential anomaly (m/s) ² | flag |
| (m) | (degree C) | | | | | |
| 0 | 18.058 | 33.337 | 18.058 | 23.986 | 0. | 2 |
| 10 | 17.707 | 33.319 | 17.705 | 24.057 | 0.39 | 1 |
| 20 | 17.260 | 33.319 | 17.257 | 24.165 | 0.77 | 1 |
| 30 | 17.046 | 33.578 | 17.041 | 24.414 | 1.14 | 1 |
| 40 | 16.589 | 33.585 | 16.583 | 24.527 | 1.49 | 1 |
| 50 | 15.674 | 33.497 | 15.666 | 24.668 | 1.82 | 1 |
| 60 | 15.192 | 33.485 | 15.183 | 24.765 | 2.15 | 1 |
| 70 | 14.848 | 33.525 | 14.838 | 24.871 | 2.46 | 1 |
| 80 | 14.741 | 33.554 | 14.729 | 24.917 | 2.77 | 1 |
| 90 | 14.207 | 33.589 | 14.194 | 25.057 | 3.07 | 1 |
| 100 | 13.464 | 33.605 | 13.450 | 25.223 | 3.36 | 1 |
| 125 | 12.183 | 33.608 | 12.167 | 25.477 | 4.02 | 1 |
| 150 | 10.832 | 33.622 | 10.814 | 25.736 | 4.62 | 1 |
| 175 | 9.971 | 33.703 | 9.951 | 25.948 | 5.16 | 1 |
| 200 | 9.140 | 33.854 | 9.118 | 26.202 | 5.66 | 1 |
| 225 | 8.640 | 33.956 | 8.616 | 26.361 | 6.10 | 1 |
| 250 | 8.294 | 33.999 | 8.268 | 26.448 | 6.52 | 1 |
| 300 | 7.622 | 34.062 | 7.592 | 26.597 | 7.30 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--|-------------------------------------|---|------|
| 54 | 190: 6: 2 | 31 43.2 N | 120 33.2 W | 9 | 1 | |
| depth | temperature | salinity | potential temperature (degree C) | sigma-theta (kg/m ³) | geopotential anomaly (m/s) ² | flag |
| (m) | (degree C) | | | | | |
| 0 | 17.309 | 33.440 | 17.309 | 24.245 | 0. | 2 |
| 10 | 16.416 | 33.255 | 16.414 | 24.312 | 0.37 | 1 |
| 20 | 16.288 | 33.383 | 16.285 | 24.440 | 0.72 | 1 |
| 30 | 15.218 | 33.382 | 15.213 | 24.679 | 1.07 | 1 |
| 40 | 14.379 | 33.272 | 14.373 | 24.775 | 1.39 | 1 |
| 50 | 13.901 | 33.257 | 13.894 | 24.863 | 1.70 | 1 |
| 60 | 13.620 | 33.337 | 13.612 | 24.983 | 2.01 | 1 |
| 70 | 13.021 | 33.316 | 13.011 | 25.087 | 2.31 | 1 |
| 80 | 12.673 | 33.339 | 12.662 | 25.173 | 2.59 | 1 |
| 90 | 12.313 | 33.363 | 12.301 | 25.261 | 2.87 | 1 |
| 100 | 11.746 | 33.388 | 11.733 | 25.388 | 3.14 | 1 |
| 125 | 10.514 | 33.597 | 10.499 | 25.771 | 3.76 | 1 |
| 150 | 9.651 | 33.745 | 9.634 | 26.033 | 4.29 | 1 |
| 175 | 9.039 | 33.863 | 9.020 | 26.225 | 4.77 | 1 |
| 200 | 8.564 | 33.955 | 8.543 | 26.372 | 5.21 | 1 |
| 225 | 8.174 | 34.022 | 8.151 | 26.484 | 5.62 | 1 |
| 250 | 7.869 | 34.037 | 7.844 | 26.541 | 6.01 | 1 |
| 300 | 7.216 | 34.074 | 7.187 | 26.664 | 6.74 | 1 |

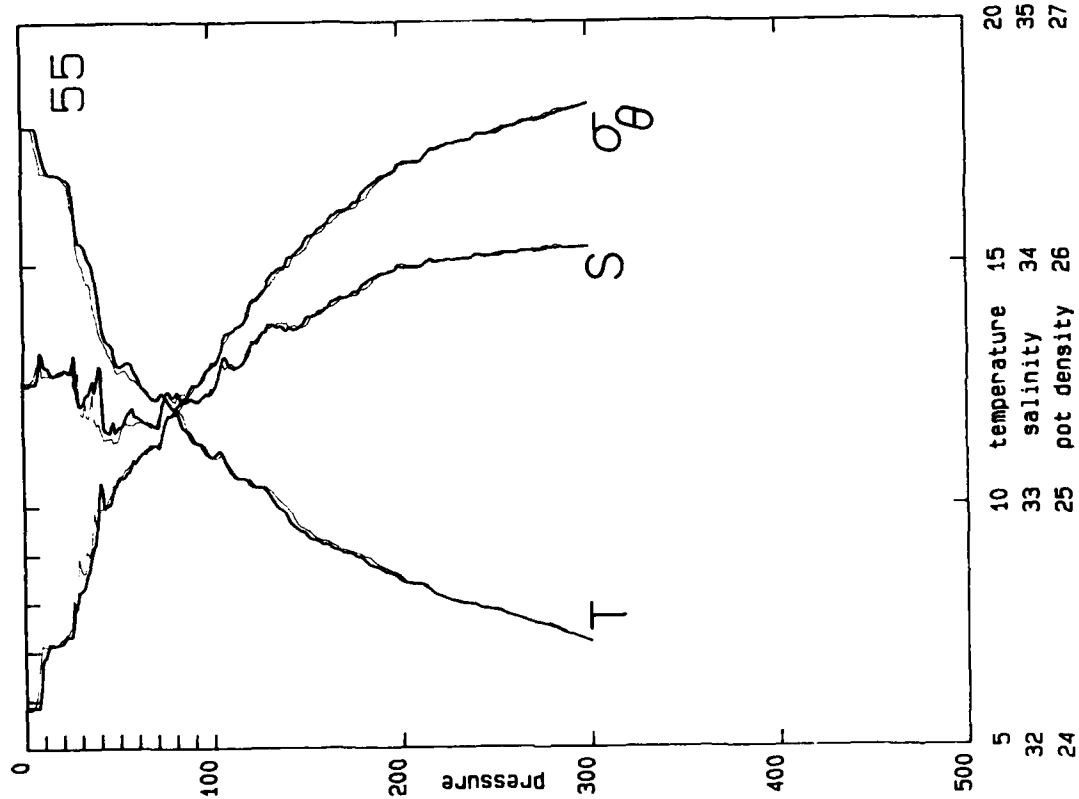
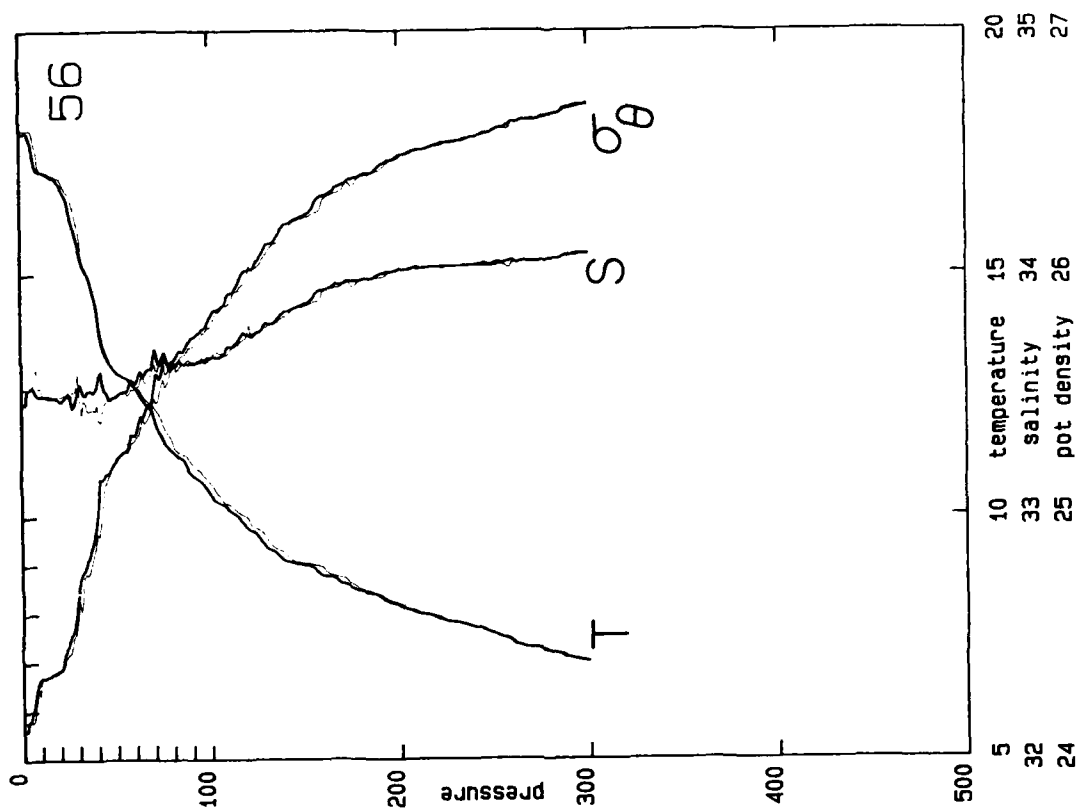


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|--------------|---------------------------|-----------|--|-------------------------------------|---|------|
| 55 | 190: 7:31 | 31 50.1 N | 120 27.5 W | 11 | 3 | |
| depth (m) | temperature (degree C) | salinity | potential temperature (degree C) | sigma-theta (kg/m ³) | geopotential anomaly (m/s) ² | flag |
| 0 | 17.842 | 33.508 | 17.842 | 24.169 | 0. | 2 |
| 10 | 17.364 | 33.627 | 17.362 | 24.376 | 0.37 | 1 |
| 20 | 16.853 | 33.554 | 16.850 | 24.441 | 0.72 | 1 |
| 30 | 15.452 | 33.414 | 15.447 | 24.652 | 1.07 | 1 |
| 40 | 14.202 | 33.585 | 14.196 | 25.053 | 1.38 | 1 |
| 50 | 12.889 | 33.324 | 12.882 | 25.119 | 1.68 | 1 |
| 60 | 12.687 | 33.366 | 12.679 | 25.191 | 1.96 | 1 |
| 70 | 12.203 | 33.334 | 12.194 | 25.259 | 2.24 | 1 |
| 80 | 11.998 | 33.455 | 11.988 | 25.392 | 2.50 | 1 |
| 90 | 11.334 | 33.442 | 11.323 | 25.505 | 2.76 | 1 |
| 100 | 11.016 | 33.487 | 11.004 | 25.597 | 3.01 | 1 |
| 125 | 10.402 | 33.701 | 10.387 | 25.872 | 3.58 | 1 |
| 150 | 9.352 | 33.783 | 9.335 | 26.112 | 4.09 | 1 |
| 175 | 8.954 | 33.884 | 8.935 | 26.255 | 4.55 | 1 |
| 200 | 8.414 | 33.983 | 8.393 | 26.417 | 4.98 | 1 |
| 225 | 8.036 | 34.017 | 8.013 | 26.500 | 5.39 | 1 |
| 250 | 7.825 | 34.031 | 7.800 | 26.543 | 5.78 | 1 |
| 300 | 7.160 | 34.069 | 7.132 | 26.667 | 6.52 | 4 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|--------------|---------------------------|-----------|--|-------------------------------------|---|------|
| 56 | 190: 8:46 | 31 57.2 N | 120 22.0 W | 12 | 4 | |
| depth (m) | temperature (degree C) | salinity | potential temperature (degree C) | sigma-theta (kg/m ³) | geopotential anomaly (m/s) ² | flag |
| 0 | 17.907 | 33.467 | 17.907 | 24.122 | 0. | 2 |
| 10 | 17.116 | 33.499 | 17.114 | 24.336 | 0.37 | 1 |
| 20 | 16.897 | 33.478 | 16.894 | 24.372 | 0.73 | 1 |
| 30 | 15.647 | 33.532 | 15.642 | 24.700 | 1.07 | 1 |
| 40 | 14.342 | 33.542 | 14.336 | 24.991 | 1.39 | 1 |
| 50 | 12.987 | 33.496 | 12.980 | 25.232 | 1.67 | 1 |
| 60 | 12.662 | 33.549 | 12.654 | 25.338 | 1.94 | 1 |
| 70 | 12.003 | 33.674 | 11.994 | 25.561 | 2.20 | 1 |
| 80 | 11.332 | 33.619 | 11.322 | 25.643 | 2.43 | 1 |
| 90 | 10.866 | 33.637 | 10.855 | 25.740 | 2.67 | 1 |
| 100 | 10.458 | 33.659 | 10.446 | 25.829 | 2.89 | 1 |
| 125 | 9.573 | 33.761 | 9.559 | 26.058 | 3.41 | 1 |
| 150 | 8.985 | 33.878 | 8.969 | 26.245 | 3.88 | 1 |
| 175 | 8.497 | 33.968 | 8.479 | 26.392 | 4.31 | 1 |
| 200 | 8.107 | 34.019 | 8.087 | 26.491 | 4.72 | 1 |
| 225 | 7.815 | 34.028 | 7.793 | 26.541 | 5.11 | 1 |
| 250 | 7.536 | 34.041 | 7.512 | 26.592 | 5.49 | 1 |
| 300 | 6.991 | 34.081 | 6.963 | 26.700 | 6.21 | 1 |

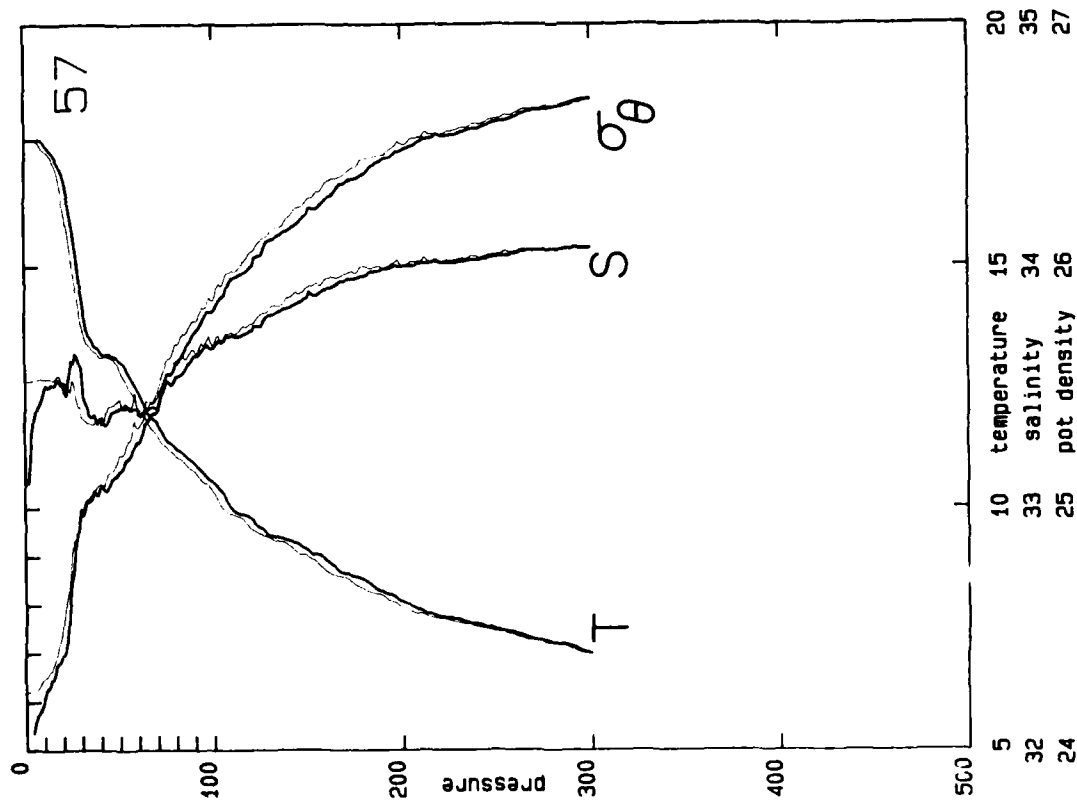
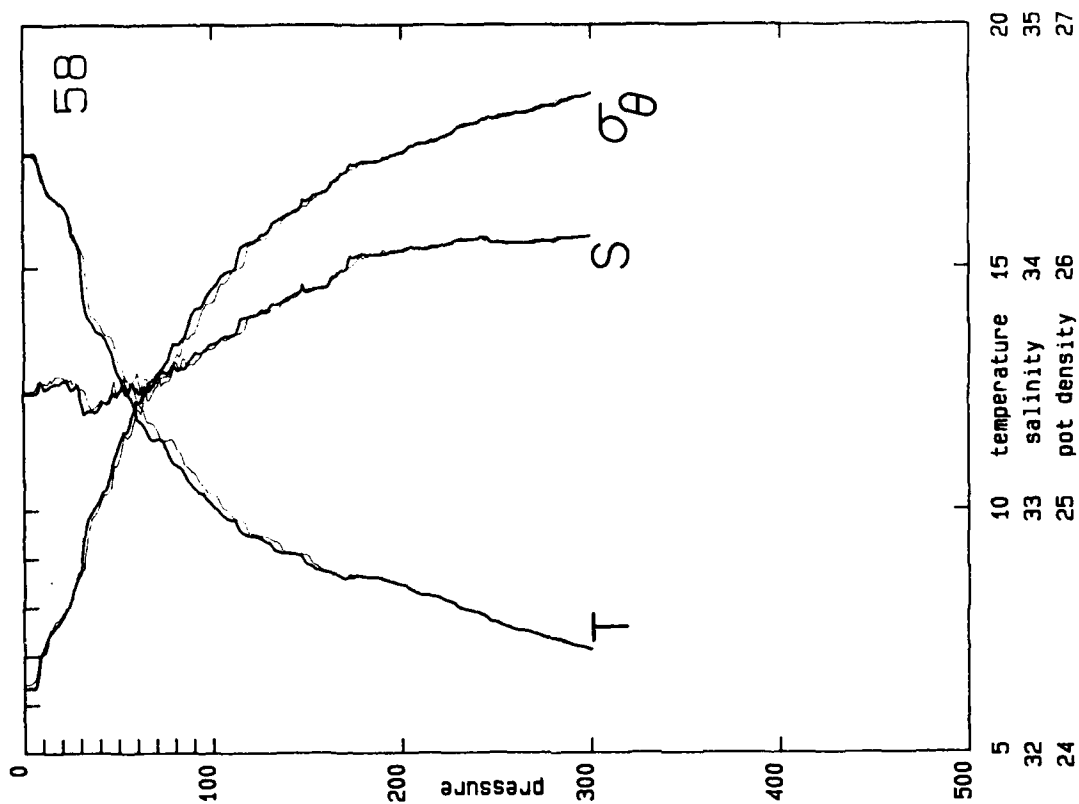


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|----------|--------------------------|----------------------|----------------------------|------|
| 57 | 190:10:12 | 32 4.5 N | 120 16.0 W | 12 | 3 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 17.623 | 33.106 | 17.623 | 23.914 | 0. | 2 |
| 10 | 17.575 | 33.491 | 17.573 | 24.221 | 0.38 | 1 |
| 20 | 16.916 | 33.511 | 16.913 | 24.393 | 0.75 | 1 |
| 30 | 14.403 | 33.563 | 14.399 | 24.994 | 1.07 | 1 |
| 40 | 13.241 | 33.375 | 13.236 | 25.088 | 1.37 | 1 |
| 50 | 13.056 | 33.405 | 13.049 | 25.148 | 1.65 | 1 |
| 60 | 12.379 | 33.400 | 12.371 | 25.277 | 1.93 | 1 |
| 70 | 11.759 | 33.421 | 11.750 | 25.410 | 2.20 | 1 |
| 80 | 11.225 | 33.542 | 11.215 | 25.602 | 2.44 | 1 |
| 90 | 10.895 | 33.630 | 10.884 | 25.730 | 2.68 | 1 |
| 100 | 10.522 | 33.664 | 10.510 | 25.822 | 2.90 | 1 |
| 125 | 9.579 | 33.754 | 9.565 | 26.052 | 3.42 | 1 |
| 150 | 9.096 | 33.880 | 9.080 | 26.229 | 3.90 | 1 |
| 175 | 8.565 | 33.951 | 8.547 | 26.368 | 4.33 | 1 |
| 200 | 8.033 | 34.001 | 8.013 | 26.488 | 4.74 | 1 |
| 225 | 7.705 | 34.013 | 7.683 | 26.545 | 5.13 | 1 |
| 250 | 7.463 | 34.040 | 7.439 | 26.602 | 5.50 | 1 |
| 300 | 6.977 | 34.077 | 6.949 | 26.699 | 6.22 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 58 | 190:11:41 | 32 12.8 N | 120 9.2 W | 13 | 1 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 17.347 | 33.481 | 17.347 | 24.268 | 0. | 2 |
| 10 | 16.844 | 33.518 | 16.842 | 24.415 | 0.36 | 1 |
| 20 | 16.293 | 33.528 | 16.290 | 24.550 | 0.71 | 1 |
| 30 | 15.240 | 33.476 | 15.235 | 24.747 | 1.04 | 1 |
| 40 | 13.649 | 33.423 | 13.643 | 25.042 | 1.34 | 1 |
| 50 | 12.781 | 33.484 | 12.774 | 25.264 | 1.62 | 1 |
| 60 | 11.902 | 33.490 | 11.894 | 25.437 | 1.89 | 1 |
| 70 | 11.465 | 33.541 | 11.456 | 25.557 | 2.14 | 1 |
| 80 | 10.937 | 33.585 | 10.927 | 25.687 | 2.38 | 1 |
| 90 | 10.428 | 33.649 | 10.417 | 25.826 | 2.60 | 1 |
| 100 | 10.062 | 33.689 | 10.051 | 25.920 | 2.82 | 1 |
| 125 | 9.415 | 33.821 | 9.401 | 26.131 | 3.32 | 1 |
| 150 | 8.866 | 33.900 | 8.850 | 26.281 | 3.78 | 1 |
| 175 | 8.662 | 34.048 | 8.644 | 26.429 | 4.20 | 1 |
| 200 | 8.450 | 34.068 | 8.429 | 26.478 | 4.61 | 1 |
| 225 | 8.097 | 34.098 | 8.074 | 26.555 | 5.00 | 1 |
| 250 | 7.681 | 34.099 | 7.656 | 26.617 | 5.37 | 1 |
| 300 | 7.102 | 34.131 | 7.074 | 26.724 | 6.08 | 4 |

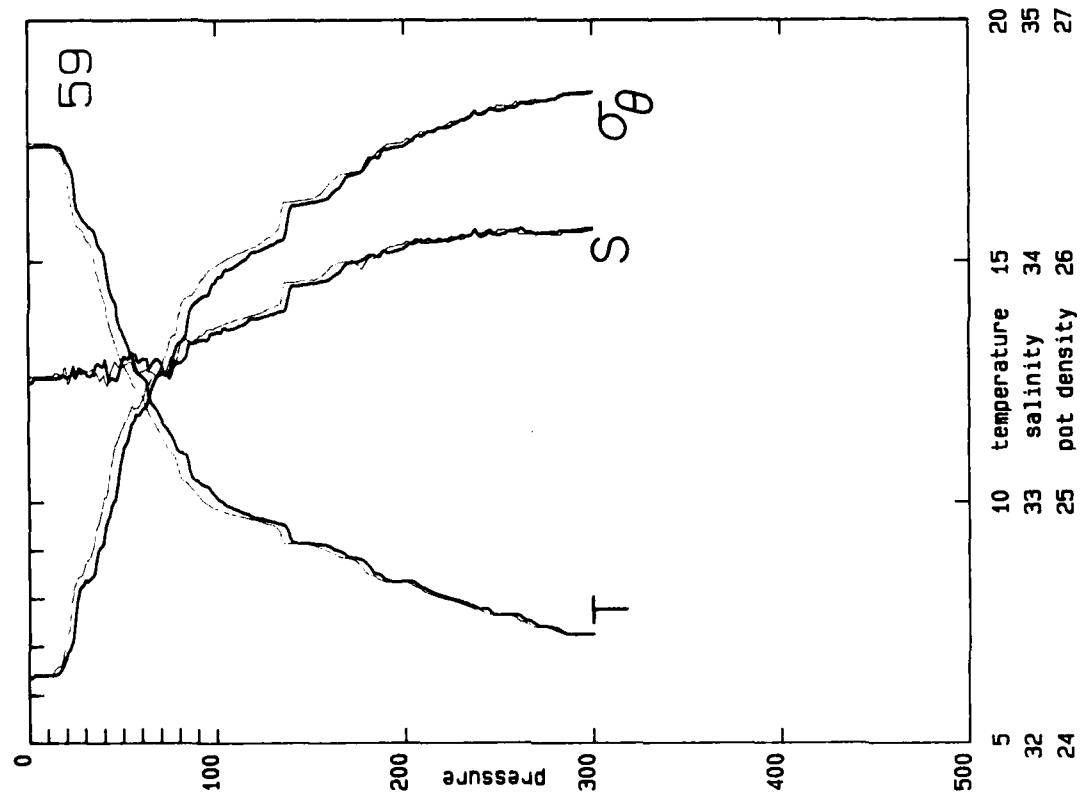
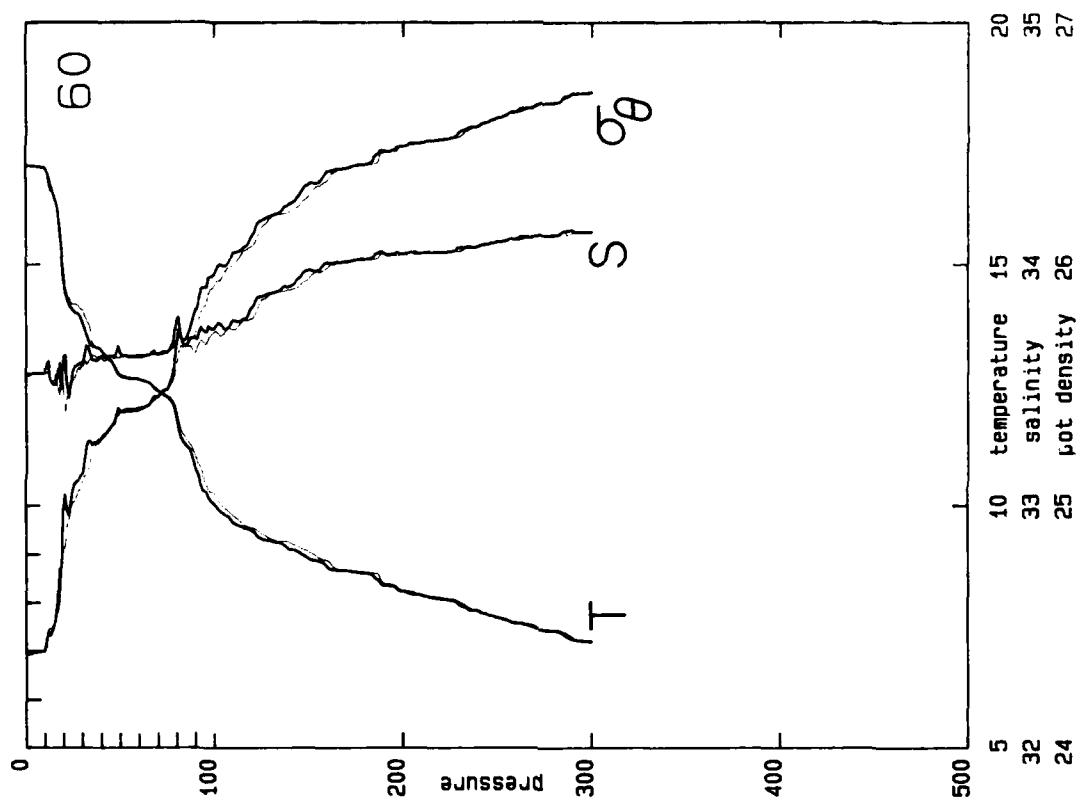


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 59 | 190:13:17 | 32 20.6 N | 120 2.9 W | 2 | 9 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 17.377 | 33.496 | 17.377 | 24.272 | 0. | 2 |
| 10 | 17.393 | 33.514 | 17.391 | 24.282 | 0.37 | 1 |
| 20 | 17.101 | 33.513 | 17.098 | 24.351 | 0.73 | 1 |
| 30 | 15.799 | 33.547 | 15.794 | 24.677 | 1.07 | 1 |
| 40 | 15.134 | 33.566 | 15.128 | 24.839 | 1.39 | 1 |
| 50 | 13.515 | 33.590 | 13.508 | 25.199 | 1.69 | 1 |
| 60 | 12.605 | 33.592 | 12.597 | 25.382 | 1.96 | 1 |
| 70 | 11.726 | 33.578 | 11.717 | 25.538 | 2.21 | 1 |
| 80 | 11.039 | 33.576 | 11.029 | 25.662 | 2.45 | 1 |
| 90 | 10.427 | 33.667 | 10.416 | 25.840 | 2.68 | 1 |
| 100 | 10.073 | 33.712 | 10.062 | 25.936 | 2.89 | 1 |
| 125 | 9.628 | 33.769 | 9.614 | 26.055 | 3.40 | 1 |
| 150 | 9.127 | 33.907 | 9.111 | 26.245 | 3.87 | 1 |
| 175 | 8.806 | 33.998 | 8.787 | 26.367 | 4.31 | 1 |
| 200 | 8.355 | 34.061 | 8.334 | 26.487 | 4.72 | 1 |
| 225 | 7.958 | 34.092 | 7.935 | 26.570 | 5.10 | 1 |
| 250 | 7.664 | 34.109 | 7.639 | 26.627 | 5.47 | 1 |
| 300 | 7.255 | 34.139 | 7.226 | 26.709 | 6.18 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 60 | 190:15: 0 | 32 31.4 N | 119 53.7 W | 8 | 2 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 17.034 | 33.542 | 17.034 | 24.388 | 0. | 2 |
| 10 | 17.010 | 33.548 | 17.008 | 24.399 | 0.35 | 1 |
| 20 | 14.792 | 33.551 | 14.789 | 24.901 | 0.69 | 1 |
| 30 | 13.785 | 33.592 | 13.781 | 25.145 | 0.98 | 1 |
| 40 | 13.208 | 33.621 | 13.203 | 25.285 | 1.26 | 1 |
| 50 | 12.697 | 33.625 | 12.690 | 25.389 | 1.52 | 1 |
| 60 | 12.618 | 33.619 | 12.610 | 25.400 | 1.78 | 1 |
| 70 | 12.366 | 33.626 | 12.357 | 25.455 | 2.04 | 1 |
| 80 | 11.696 | 33.778 | 11.686 | 25.699 | 2.29 | 1 |
| 90 | 10.689 | 33.680 | 10.678 | 25.805 | 2.52 | 1 |
| 100 | 10.011 | 33.741 | 10.000 | 25.969 | 2.73 | 1 |
| 125 | 9.304 | 33.866 | 9.290 | 26.184 | 3.22 | 1 |
| 150 | 8.884 | 33.979 | 8.868 | 26.340 | 3.67 | 1 |
| 175 | 8.620 | 34.021 | 8.602 | 26.414 | 4.09 | 1 |
| 200 | 8.227 | 34.045 | 8.207 | 26.493 | 4.49 | 1 |
| 225 | 8.043 | 34.054 | 8.020 | 26.528 | 4.88 | 1 |
| 250 | 7.685 | 34.093 | 7.660 | 26.611 | 5.26 | 1 |
| 300 | 7.168 | 34.139 | 7.139 | 26.722 | 5.97 | 1 |

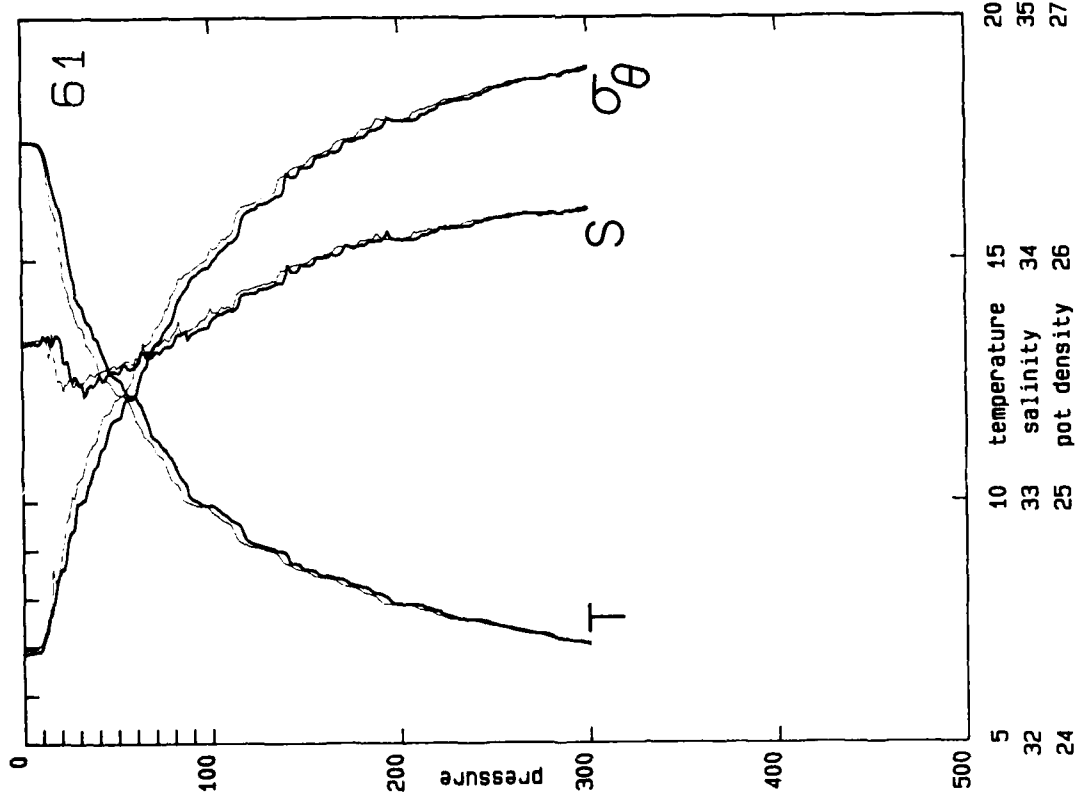
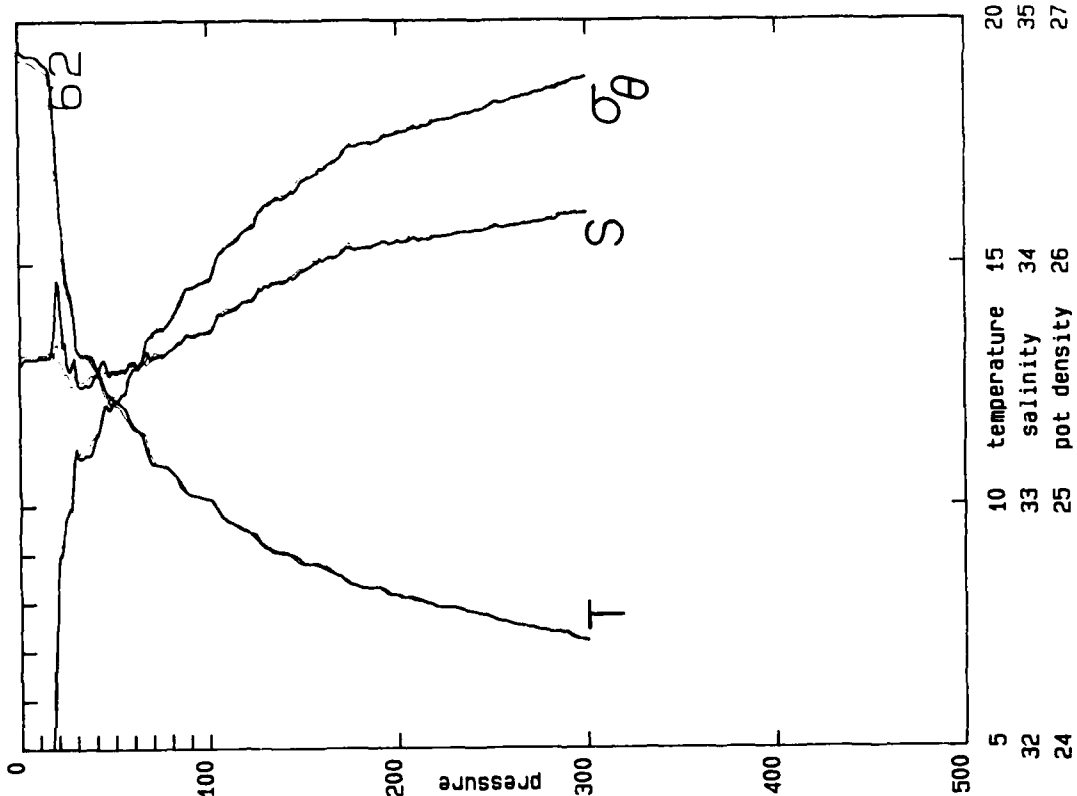


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|--------------|---------------------------|-----------|--|-------------------------------------|---|------|
| 61 | 190:18:30 | 32 16.4 N | 119 49.9 W | 11 | 3 | |
| depth (m) | temperature (degree C) | salinity | potential temperature (degree C) | sigma-theta (kg/m ³) | geopotential anomaly (m/s) ² | flag |
| 0 | 17.450 | 33.651 | 17.450 | 24.373 | 0. | 2 |
| 10 | 17.381 | 33.661 | 17.379 | 24.398 | 0.36 | 1 |
| 20 | 16.065 | 33.674 | 16.062 | 24.715 | 0.69 | 1 |
| 30 | 14.094 | 33.480 | 14.090 | 24.995 | 1.01 | 1 |
| 40 | 13.337 | 33.506 | 13.331 | 25.170 | 1.30 | 1 |
| 50 | 12.563 | 33.535 | 12.556 | 25.346 | 1.57 | 1 |
| 60 | 12.179 | 33.568 | 12.171 | 25.445 | 1.83 | 1 |
| 70 | 11.300 | 33.618 | 11.291 | 25.647 | 2.07 | 1 |
| 80 | 10.796 | 33.655 | 10.786 | 25.767 | 2.30 | 1 |
| 90 | 10.046 | 33.696 | 10.036 | 25.928 | 2.52 | 1 |
| 100 | 9.923 | 33.747 | 9.912 | 25.989 | 2.72 | 1 |
| 125 | 9.074 | 33.879 | 9.061 | 26.231 | 3.20 | 1 |
| 150 | 8.582 | 33.976 | 8.566 | 26.384 | 3.64 | 1 |
| 175 | 8.248 | 34.046 | 8.230 | 26.490 | 4.05 | 1 |
| 200 | 7.861 | 34.080 | 7.841 | 26.575 | 4.43 | 1 |
| 225 | 7.603 | 34.127 | 7.581 | 26.650 | 4.80 | 1 |
| 250 | 7.414 | 34.172 | 7.390 | 26.712 | 5.15 | 1 |
| 300 | 7.001 | 34.210 | 6.973 | 26.800 | 5.82 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|--------------|---------------------------|-----------|--|-------------------------------------|---|------|
| 62 | 190:21: 3 | 31 59.8 N | 119 46.8 W | 4 | 14 | |
| depth (m) | temperature (degree C) | salinity | potential temperature (degree C) | sigma-theta (kg/m ³) | geopotential anomaly (m/s) ² | flag |
| 0 | 19.396 | 33.587 | 19.396 | 23.842 | 0. | 2 |
| 10 | 19.259 | 33.614 | 19.257 | 23.898 | 0.40 | 1 |
| 20 | 17.061 | 33.939 | 17.058 | 24.687 | 0.79 | 1 |
| 30 | 13.241 | 33.550 | 13.237 | 25.223 | 1.09 | 1 |
| 40 | 12.931 | 33.539 | 12.926 | 25.276 | 1.37 | 1 |
| 50 | 12.199 | 33.554 | 12.192 | 25.430 | 1.63 | 1 |
| 60 | 11.641 | 33.597 | 11.633 | 25.568 | 1.88 | 1 |
| 70 | 10.863 | 33.614 | 10.855 | 25.723 | 2.11 | 1 |
| 80 | 10.702 | 33.646 | 10.692 | 25.776 | 2.34 | 1 |
| 90 | 10.224 | 33.698 | 10.214 | 25.900 | 2.56 | 1 |
| 100 | 10.130 | 33.719 | 10.118 | 25.932 | 2.77 | 1 |
| 125 | 9.363 | 33.872 | 9.349 | 26.179 | 3.26 | 1 |
| 150 | 8.807 | 33.970 | 8.791 | 26.345 | 3.70 | 1 |
| 175 | 8.366 | 34.060 | 8.348 | 26.484 | 4.12 | 1 |
| 200 | 8.102 | 34.087 | 8.082 | 26.545 | 4.51 | 1 |
| 225 | 7.895 | 34.113 | 7.872 | 26.596 | 4.88 | 1 |
| 250 | 7.633 | 34.156 | 7.608 | 26.668 | 5.25 | 1 |
| 300 | 7.185 | 34.203 | 7.156 | 26.770 | 5.93 | 1 |

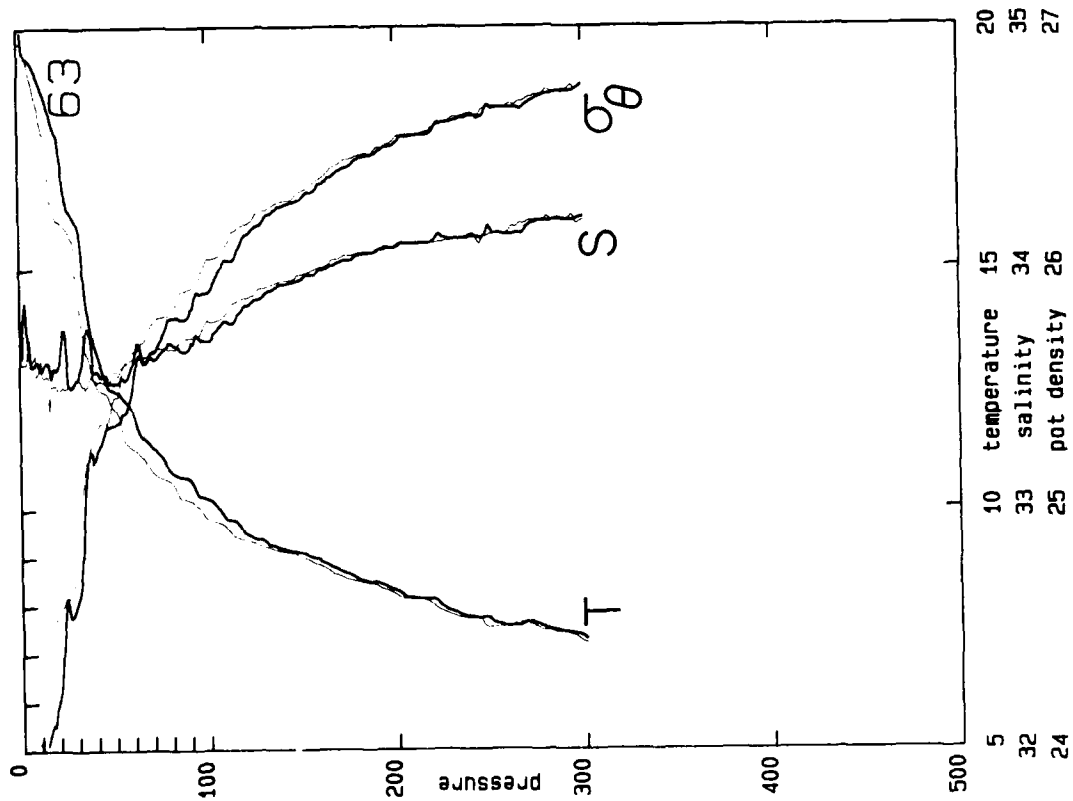
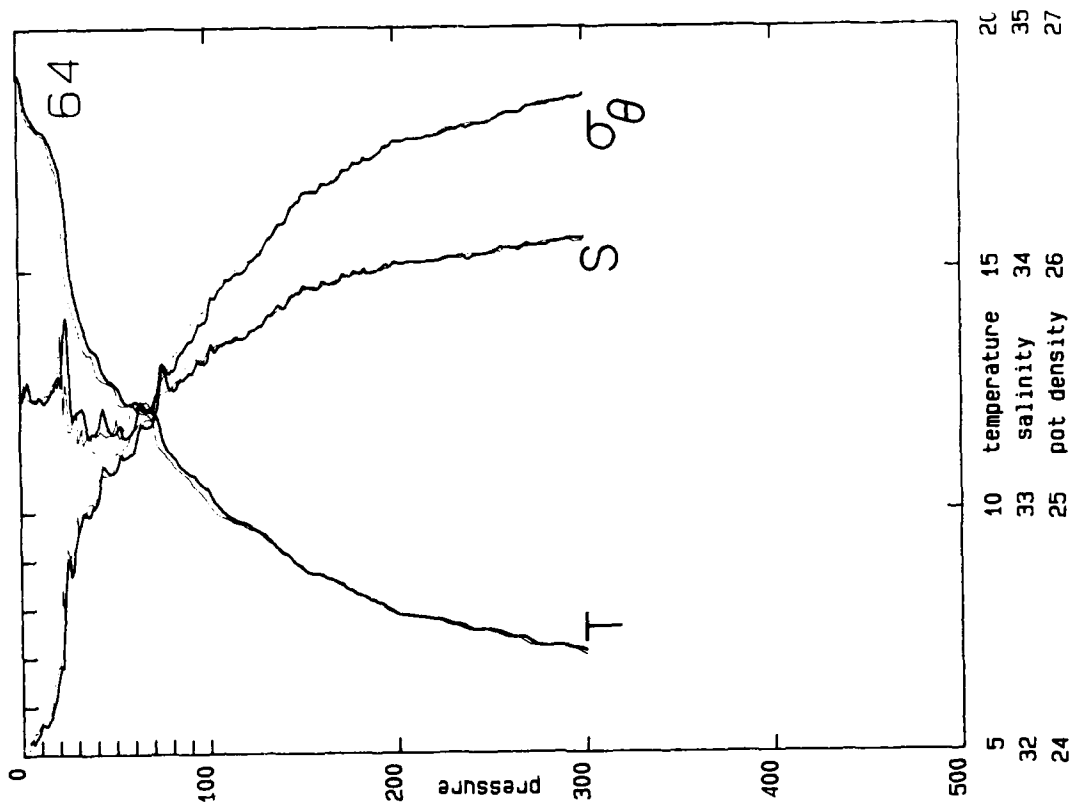


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--|-------------------------------------|---|------|
| 63 | 190:23: 5 | 31 43.3 N | 119 42.9 W | 2 | 11 | |
| depth | temperature | salinity | potential temperature (degree C) | sigma-theta (kg/m ³) | geopotential anomaly (m/s) ² | flag |
| (m) | (degree C) | | | | | |
| 0 | 20.262 | 33.635 | 20.262 | 23.653 | 0. | 2 |
| 10 | 19.013 | 33.605 | 19.011 | 23.953 | 0.40 | 1 |
| 20 | 17.821 | 33.580 | 17.818 | 24.230 | 0.79 | 1 |
| 30 | 15.989 | 33.540 | 15.984 | 24.629 | 1.13 | 1 |
| 40 | 13.324 | 33.570 | 13.318 | 25.222 | 1.42 | 1 |
| 50 | 12.461 | 33.524 | 12.454 | 25.357 | 1.69 | 1 |
| 60 | 12.001 | 33.615 | 11.993 | 25.515 | 1.95 | 1 |
| 70 | 11.282 | 33.624 | 11.273 | 25.655 | 2.19 | 1 |
| 80 | 10.777 | 33.693 | 10.767 | 25.799 | 2.42 | 1 |
| 90 | 10.616 | 33.678 | 10.605 | 25.816 | 2.64 | 1 |
| 100 | 10.203 | 33.698 | 10.191 | 25.903 | 2.85 | 1 |
| 125 | 9.382 | 33.870 | 9.368 | 26.175 | 3.35 | 1 |
| 150 | 9.068 | 33.955 | 9.052 | 26.292 | 3.80 | 1 |
| 175 | 8.613 | 34.031 | 8.595 | 26.423 | 4.23 | 1 |
| 200 | 8.262 | 34.089 | 8.241 | 26.522 | 4.62 | 1 |
| 225 | 7.894 | 34.127 | 7.871 | 26.608 | 5.00 | 1 |
| 250 | 7.613 | 34.153 | 7.588 | 26.669 | 5.36 | 1 |
| 300 | 7.224 | 34.197 | 7.195 | 26.759 | 6.06 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--|-------------------------------------|---|------|
| 64 | 191: 0:35 | 31 35.6 N | 119 48.8 W | 1 | 26 | |
| depth | temperature | salinity | potential temperature (degree C) | sigma-theta (kg/m ³) | geopotential anomaly (m/s) ² | flag |
| (m) | (degree C) | | | | | |
| 0 | 19.053 | 33.467 | 19.053 | 23.838 | 0. | 2 |
| 10 | 17.942 | 33.483 | 17.940 | 24.126 | 0.39 | 1 |
| 20 | 17.310 | 33.563 | 17.307 | 24.340 | 0.77 | 1 |
| 30 | 14.357 | 33.409 | 14.353 | 24.885 | 1.09 | 1 |
| 40 | 13.322 | 33.322 | 13.316 | 25.031 | 1.39 | 1 |
| 50 | 12.636 | 33.325 | 12.629 | 25.169 | 1.68 | 1 |
| 60 | 12.275 | 33.339 | 12.267 | 25.249 | 1.95 | 1 |
| 70 | 12.066 | 33.441 | 12.057 | 25.368 | 2.22 | 1 |
| 80 | 11.191 | 33.511 | 11.181 | 25.584 | 2.47 | 1 |
| 90 | 10.775 | 33.577 | 10.764 | 25.710 | 2.70 | 1 |
| 100 | 10.396 | 33.647 | 10.384 | 25.830 | 2.93 | 1 |
| 125 | 9.617 | 33.755 | 9.603 | 26.046 | 3.45 | 1 |
| 150 | 8.794 | 33.928 | 8.778 | 26.314 | 3.91 | 1 |
| 175 | 8.360 | 33.969 | 8.342 | 26.413 | 4.34 | 1 |
| 200 | 7.868 | 34.027 | 7.848 | 26.532 | 4.74 | 1 |
| 225 | 7.711 | 34.042 | 7.689 | 26.567 | 5.12 | 1 |
| 250 | 7.521 | 34.071 | 7.497 | 26.618 | 5.49 | 1 |
| 300 | 7.038 | 34.144 | 7.010 | 26.743 | 6.19 | 1 |

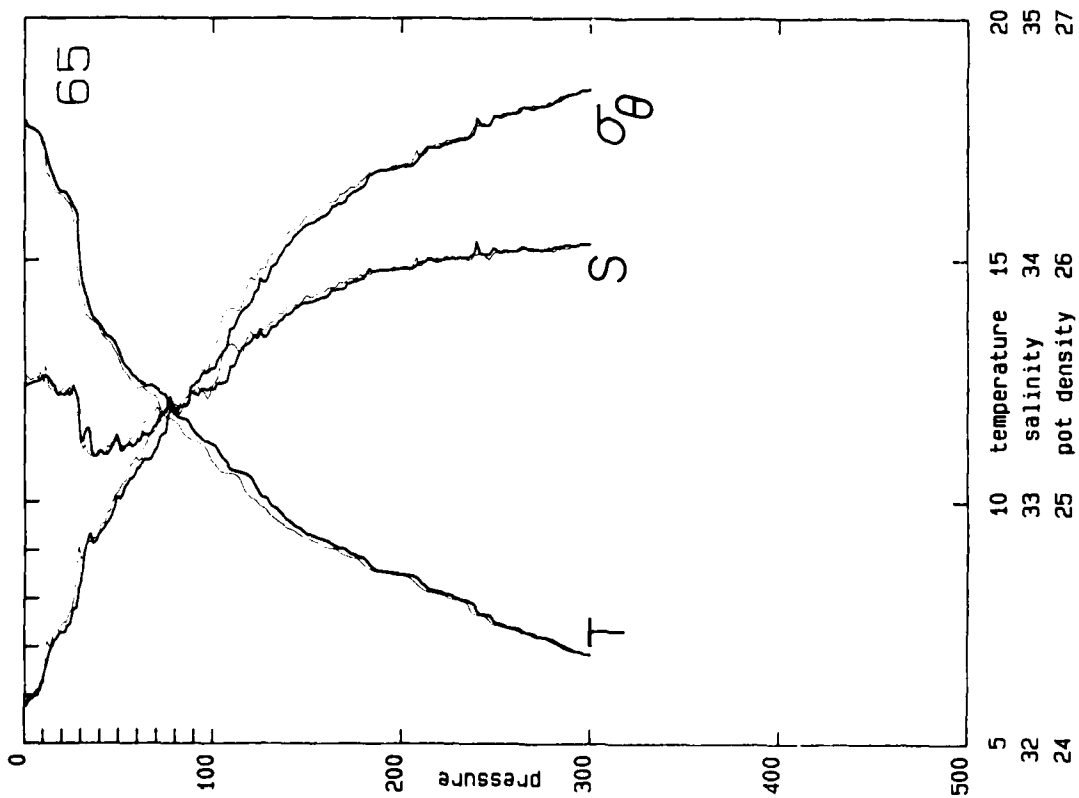
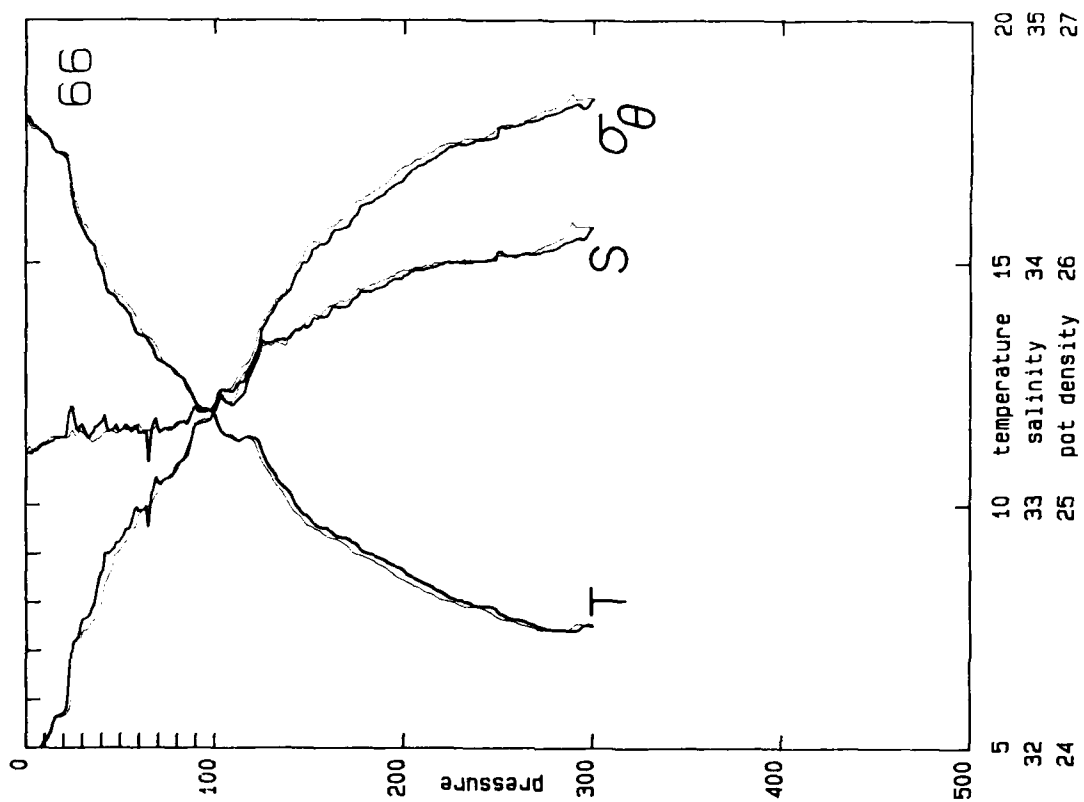


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 65 | 191: 2: 3 | 31 27.0 N | 119 55.5 W | 6 | 36 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 17.808 | 33.481 | 17.808 | 24.157 | 0. | 2 |
| 10 | 17.413 | 33.519 | 17.411 | 24.281 | 0.37 | 1 |
| 20 | 16.407 | 33.443 | 16.404 | 24.459 | 0.73 | 1 |
| 30 | 14.775 | 33.231 | 14.771 | 24.659 | 1.07 | 1 |
| 40 | 13.645 | 33.205 | 13.639 | 24.875 | 1.38 | 1 |
| 50 | 13.102 | 33.257 | 13.095 | 25.025 | 1.68 | 1 |
| 60 | 12.506 | 33.249 | 12.498 | 25.135 | 1.98 | 1 |
| 70 | 12.334 | 33.323 | 12.325 | 25.226 | 2.26 | 1 |
| 80 | 11.800 | 33.378 | 11.790 | 25.369 | 2.52 | 1 |
| 90 | 11.430 | 33.446 | 11.419 | 25.490 | 2.78 | 1 |
| 100 | 11.172 | 33.462 | 11.160 | 25.550 | 3.03 | 1 |
| 125 | 10.122 | 33.702 | 10.108 | 25.921 | 3.60 | 1 |
| 150 | 9.303 | 33.824 | 9.287 | 26.152 | 4.10 | 1 |
| 175 | 8.880 | 33.912 | 8.861 | 26.288 | 4.56 | 1 |
| 200 | 8.486 | 33.966 | 8.465 | 26.392 | 4.99 | 1 |
| 225 | 8.064 | 34.008 | 8.041 | 26.489 | 5.39 | 1 |
| 250 | 7.482 | 34.036 | 7.458 | 26.596 | 5.78 | 1 |
| 300 | 6.842 | 34.068 | 6.814 | 26.710 | 6.49 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 66 | 191: 3:22 | 31 19.5 N | 120 1.4 W | 9 | 1 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 18.004 | 33.216 | 18.004 | 23.906 | 0. | 2 |
| 10 | 17.629 | 33.250 | 17.627 | 24.023 | 0.40 | 1 |
| 20 | 17.200 | 33.279 | 17.197 | 24.148 | 0.78 | 1 |
| 30 | 15.714 | 33.334 | 15.709 | 24.532 | 1.14 | 1 |
| 40 | 14.888 | 33.340 | 14.882 | 24.719 | 1.47 | 1 |
| 50 | 14.112 | 33.303 | 14.105 | 24.855 | 1.79 | 1 |
| 60 | 13.499 | 33.302 | 13.491 | 24.980 | 2.09 | 1 |
| 70 | 12.969 | 33.302 | 12.960 | 25.086 | 2.39 | 1 |
| 80 | 12.681 | 33.339 | 12.670 | 25.172 | 2.68 | 1 |
| 90 | 12.070 | 33.400 | 12.058 | 25.336 | 2.95 | 1 |
| 100 | 11.835 | 33.420 | 11.822 | 25.396 | 3.22 | 1 |
| 125 | 11.034 | 33.693 | 11.019 | 25.755 | 3.84 | 1 |
| 150 | 9.716 | 33.746 | 9.699 | 26.023 | 4.38 | 1 |
| 175 | 9.155 | 33.863 | 9.136 | 26.207 | 4.86 | 1 |
| 200 | 8.597 | 33.947 | 8.576 | 26.360 | 5.30 | 1 |
| 225 | 8.059 | 33.996 | 8.036 | 26.480 | 5.71 | 1 |
| 250 | 7.750 | 34.055 | 7.725 | 26.572 | 6.11 | 1 |
| 300 | 7.511 | 34.146 | 7.482 | 26.679 | 6.84 | 1 |

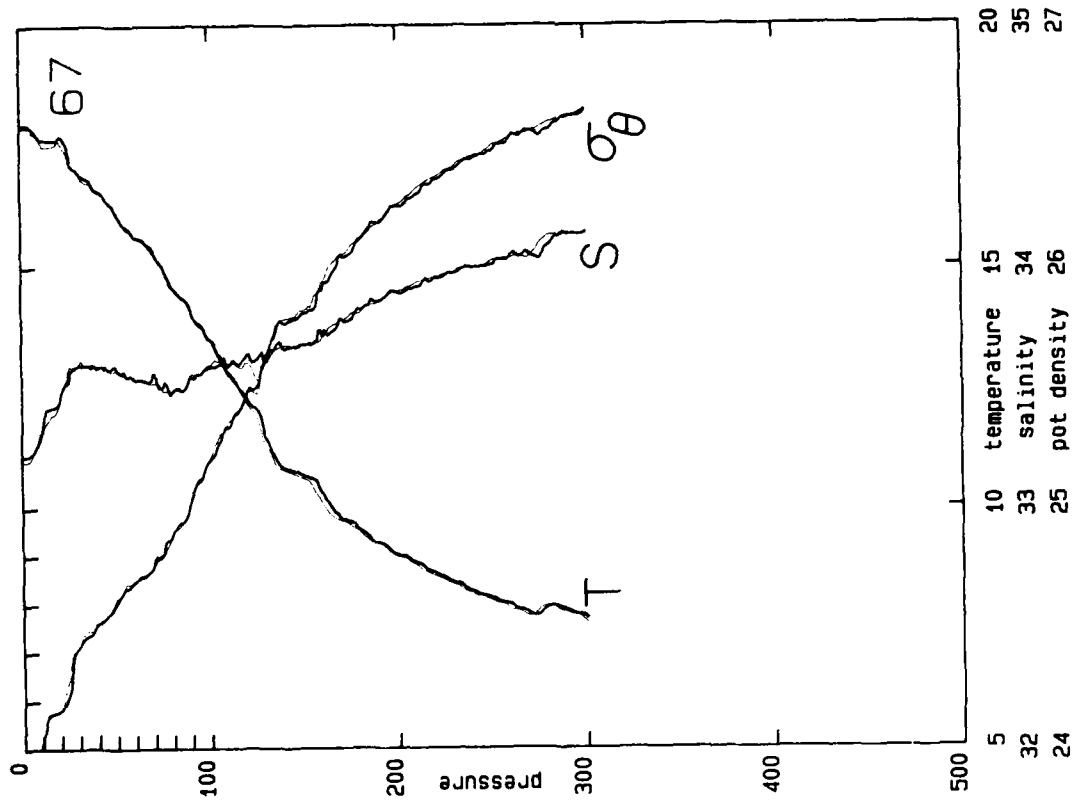
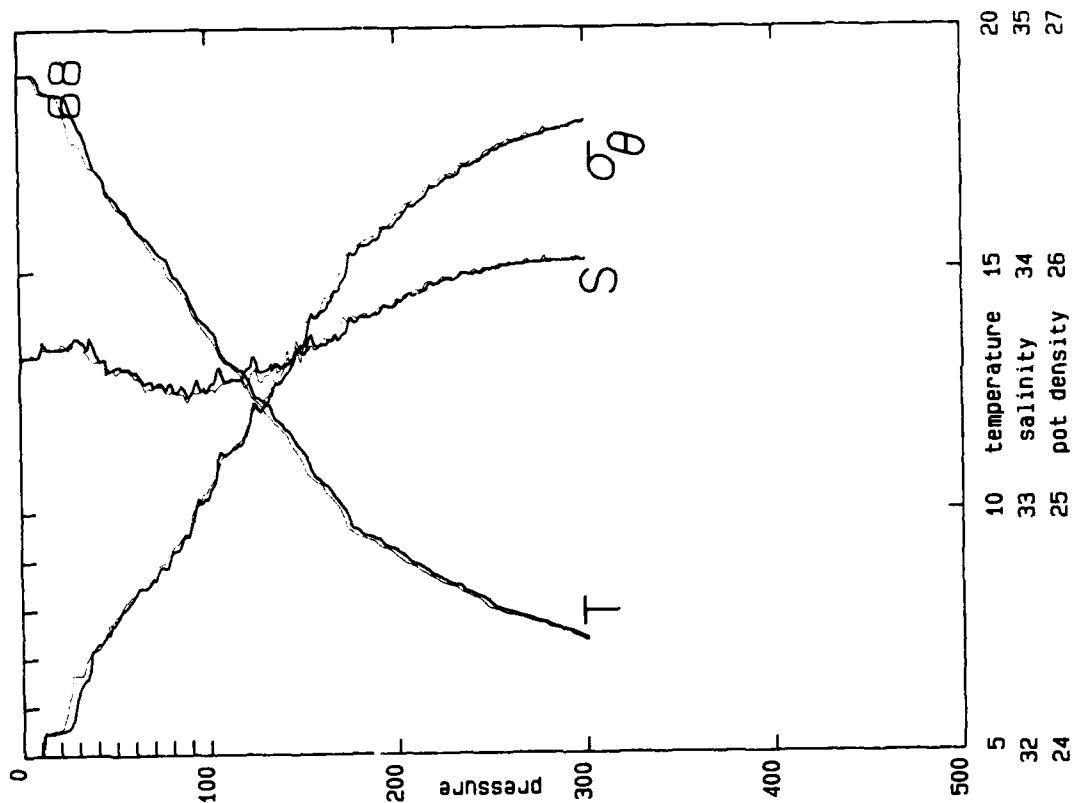


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 67 | 191: 4:37 | 31 11.5 N | 120 7.8 W | 6 | 1 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 17.926 | 33.218 | 17.926 | 23.927 | 0. | 2 |
| 10 | 17.708 | 33.302 | 17.706 | 24.044 | 0.40 | 1 |
| 20 | 17.660 | 33.452 | 17.657 | 24.171 | 0.78 | 1 |
| 30 | 17.021 | 33.591 | 17.016 | 24.430 | 1.14 | 1 |
| 40 | 16.593 | 33.583 | 16.587 | 24.524 | 1.49 | 1 |
| 50 | 16.153 | 33.589 | 16.145 | 24.630 | 1.83 | 1 |
| 60 | 15.630 | 33.534 | 15.621 | 24.706 | 2.16 | 1 |
| 70 | 15.324 | 33.562 | 15.313 | 24.796 | 2.48 | 1 |
| 80 | 14.569 | 33.480 | 14.557 | 24.896 | 2.80 | 1 |
| 90 | 14.089 | 33.550 | 14.076 | 25.052 | 3.10 | 1 |
| 100 | 13.482 | 33.584 | 13.468 | 25.203 | 3.39 | 1 |
| 125 | 12.028 | 33.618 | 12.012 | 25.534 | 4.04 | 1 |
| 150 | 10.654 | 33.678 | 10.636 | 25.811 | 4.62 | 1 |
| 175 | 9.675 | 33.779 | 9.655 | 26.056 | 5.15 | 1 |
| 200 | 8.992 | 33.886 | 8.970 | 26.251 | 5.62 | 1 |
| 225 | 8.495 | 33.967 | 8.472 | 26.392 | 6.05 | 1 |
| 250 | 8.096 | 34.007 | 8.071 | 26.484 | 6.46 | 1 |
| 300 | 7.647 | 34.143 | 7.617 | 26.657 | 7.22 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|----------|--------------------------|----------------------|----------------------------|------|
| 68 | 191: 6: 4 | 31 4.0 N | 120 14.8 W | 6 | 1 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 19.081 | 33.644 | 19.081 | 23.966 | 0. | 2 |
| 10 | 19.000 | 33.654 | 18.998 | 23.994 | 0.40 | 1 |
| 20 | 18.657 | 33.682 | 18.653 | 24.102 | 0.78 | 1 |
| 30 | 18.156 | 33.725 | 18.151 | 24.260 | 1.16 | 1 |
| 40 | 17.106 | 33.656 | 17.099 | 24.460 | 1.52 | 1 |
| 50 | 16.518 | 33.604 | 16.510 | 24.558 | 1.86 | 1 |
| 60 | 15.995 | 33.584 | 15.986 | 24.663 | 2.20 | 1 |
| 70 | 15.538 | 33.541 | 15.527 | 24.732 | 2.53 | 1 |
| 80 | 15.031 | 33.550 | 15.019 | 24.851 | 2.85 | 1 |
| 90 | 14.344 | 33.482 | 14.331 | 24.946 | 3.16 | 1 |
| 100 | 13.809 | 33.512 | 13.795 | 25.080 | 3.45 | 1 |
| 125 | 12.371 | 33.611 | 12.355 | 25.443 | 4.14 | 1 |
| 150 | 11.214 | 33.651 | 11.195 | 25.691 | 4.76 | 1 |
| 175 | 9.677 | 33.798 | 9.657 | 26.071 | 5.30 | 1 |
| 200 | 9.169 | 33.870 | 9.147 | 26.210 | 5.78 | 1 |
| 225 | 8.544 | 33.962 | 8.520 | 26.380 | 6.22 | 1 |
| 250 | 8.020 | 34.010 | 7.995 | 26.497 | 6.63 | 1 |
| 300 | 7.332 | 34.042 | 7.303 | 26.622 | 7.39 | 1 |

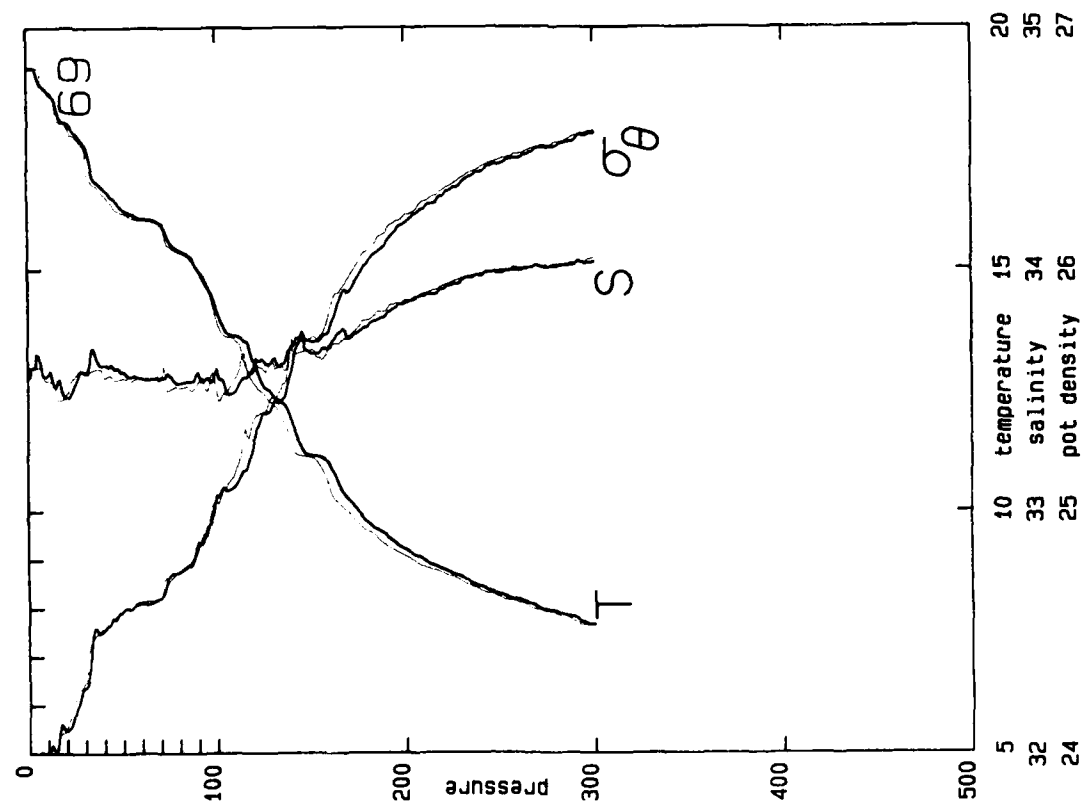
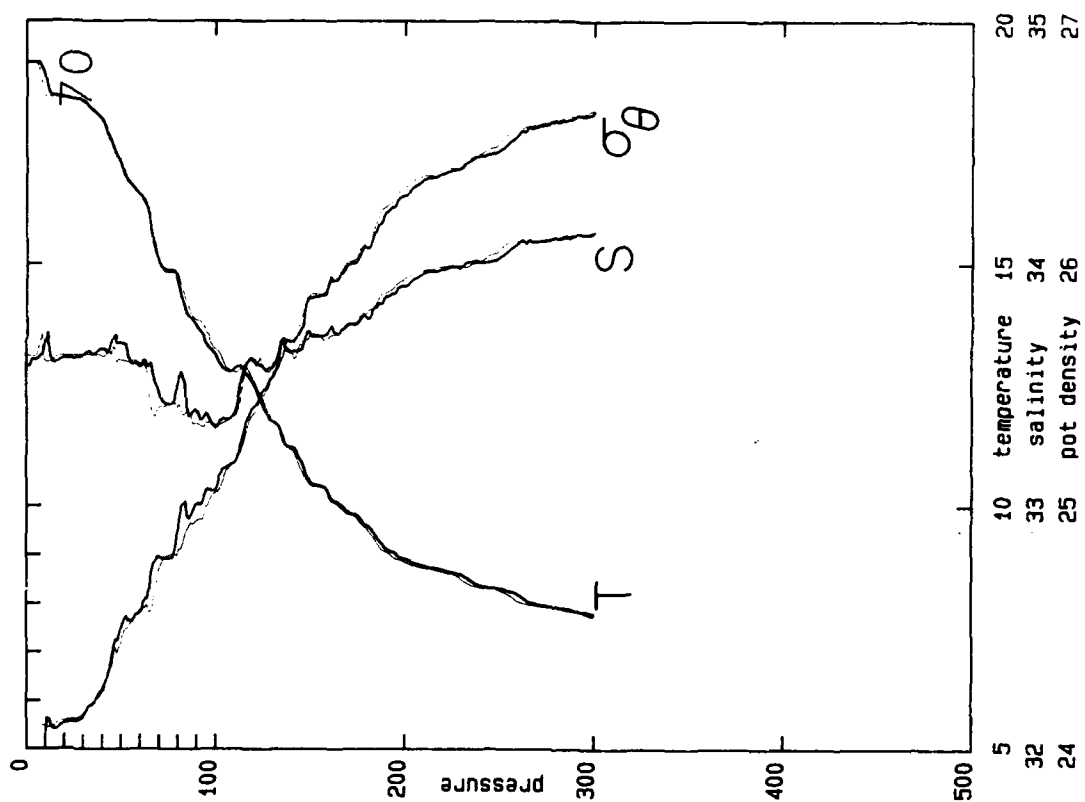


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 69 | 191: 7:22 | 30 56.4 N | 120 21.0 W | 7 | 9 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 19.166 | 33.557 | 19.166 | 23.878 | 0. | 2 |
| 10 | 18.723 | 33.560 | 18.721 | 23.992 | 0.40 | 1 |
| 20 | 18.031 | 33.469 | 18.028 | 24.094 | 0.79 | 1 |
| 30 | 17.604 | 33.574 | 17.599 | 24.278 | 1.16 | 1 |
| 40 | 16.704 | 33.603 | 16.698 | 24.514 | 1.51 | 1 |
| 50 | 16.260 | 33.580 | 16.252 | 24.599 | 1.85 | 1 |
| 60 | 16.057 | 33.549 | 16.048 | 24.622 | 2.19 | 1 |
| 70 | 15.962 | 33.552 | 15.951 | 24.646 | 2.52 | 1 |
| 80 | 15.396 | 33.532 | 15.384 | 24.757 | 2.85 | 1 |
| 90 | 14.988 | 33.573 | 14.974 | 24.878 | 3.16 | 1 |
| 100 | 14.105 | 33.548 | 14.091 | 25.047 | 3.47 | 1 |
| 125 | 12.559 | 33.608 | 12.542 | 25.405 | 4.17 | 1 |
| 150 | 11.147 | 33.650 | 11.129 | 25.702 | 4.79 | 1 |
| 175 | 9.958 | 33.745 | 9.938 | 25.983 | 5.34 | 1 |
| 200 | 9.180 | 33.861 | 9.158 | 26.201 | 5.83 | 1 |
| 225 | 8.675 | 33.941 | 8.651 | 26.344 | 6.27 | 1 |
| 250 | 8.262 | 33.985 | 8.236 | 26.442 | 6.69 | 1 |
| 300 | 7.671 | 34.032 | 7.641 | 26.566 | 7.48 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 70 | 191: 9:22 | 30 48.3 N | 120 8.1 W | 6 | 25 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 19.146 | 33.578 | 19.146 | 23.899 | 0. | 2 |
| 10 | 18.840 | 33.669 | 18.838 | 24.046 | 0.40 | 1 |
| 20 | 18.415 | 33.611 | 18.412 | 24.108 | 0.78 | 1 |
| 30 | 18.347 | 33.620 | 18.342 | 24.132 | 1.16 | 1 |
| 40 | 17.961 | 33.648 | 17.954 | 24.249 | 1.54 | 1 |
| 50 | 17.006 | 33.674 | 16.998 | 24.498 | 1.90 | 1 |
| 60 | 16.401 | 33.573 | 16.391 | 24.562 | 2.24 | 1 |
| 70 | 14.986 | 33.467 | 14.976 | 24.796 | 2.57 | 1 |
| 80 | 14.617 | 33.500 | 14.605 | 24.901 | 2.89 | 1 |
| 90 | 13.661 | 33.387 | 13.648 | 25.014 | 3.19 | 1 |
| 100 | 13.105 | 33.316 | 13.091 | 25.071 | 3.48 | 1 |
| 125 | 12.007 | 33.575 | 11.991 | 25.485 | 4.16 | 1 |
| 150 | 10.471 | 33.700 | 10.453 | 25.860 | 4.75 | 1 |
| 175 | 9.765 | 33.766 | 9.745 | 26.031 | 5.28 | 1 |
| 200 | 8.896 | 33.910 | 8.875 | 26.285 | 5.75 | 1 |
| 225 | 8.619 | 33.989 | 8.595 | 26.390 | 6.18 | 1 |
| 250 | 8.298 | 34.033 | 8.272 | 26.474 | 6.59 | 1 |
| 300 | 7.740 | 34.129 | 7.710 | 26.633 | 7.35 | 1 |

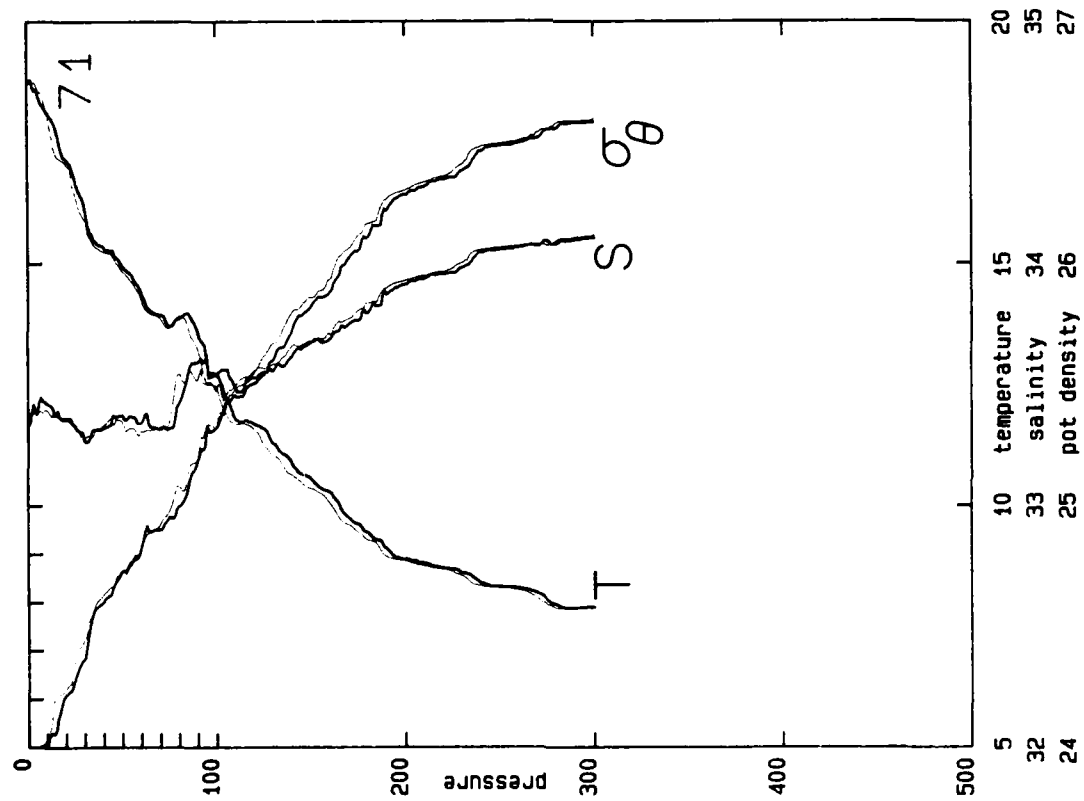
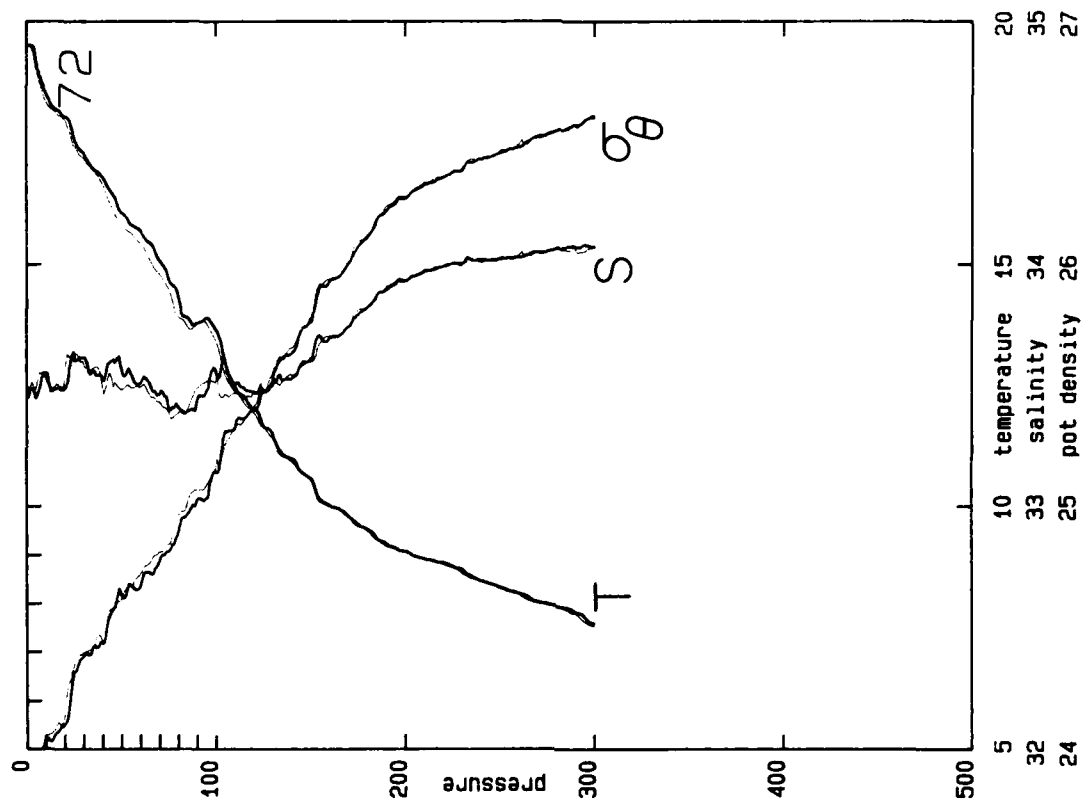


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|--------------|---------------------------|-----------|--|-------------------------------------|---|------|
| 71 | 191:12: 1 | 30 33.9 N | 119 46.8 W | 3 | 36 | |
| depth (m) | temperature (degree C) | salinity | potential temperature (degree C) | sigma-theta (kg/m ³) | geopotential anomaly (m/s) ² | flag |
| 0 | 18.787 | 33.336 | 18.787 | 23.805 | 0. | 2 |
| 10 | 18.136 | 33.419 | 18.134 | 24.030 | 0.40 | 1 |
| 20 | 17.158 | 33.356 | 17.155 | 24.217 | 0.78 | 1 |
| 30 | 16.209 | 33.267 | 16.204 | 24.370 | 1.15 | 1 |
| 40 | 15.335 | 33.321 | 15.329 | 24.607 | 1.49 | 1 |
| 50 | 14.944 | 33.377 | 14.937 | 24.735 | 1.82 | 1 |
| 60 | 14.372 | 33.354 | 14.363 | 24.840 | 2.14 | 1 |
| 70 | 13.928 | 33.315 | 13.918 | 24.903 | 2.44 | 1 |
| 80 | 13.866 | 33.426 | 13.855 | 25.002 | 2.75 | 1 |
| 90 | 13.534 | 33.595 | 13.521 | 25.201 | 3.04 | 1 |
| 100 | 12.689 | 33.546 | 12.676 | 25.331 | 3.31 | 1 |
| 125 | 11.580 | 33.553 | 11.564 | 25.547 | 3.95 | 1 |
| 150 | 10.529 | 33.676 | 10.511 | 25.831 | 4.53 | 1 |
| 175 | 9.590 | 33.768 | 9.570 | 26.062 | 5.05 | 1 |
| 200 | 8.879 | 33.914 | 8.858 | 26.291 | 5.52 | 1 |
| 225 | 8.671 | 33.959 | 8.647 | 26.359 | 5.95 | 1 |
| 250 | 8.303 | 34.058 | 8.277 | 26.493 | 6.36 | 1 |
| 300 | 7.904 | 34.107 | 7.874 | 26.591 | 7.13 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|--------------|---------------------------|-----------|--|-------------------------------------|---|------|
| 72 | 191:15: 6 | 30 18.5 N | 119 21.1 W | 11 | 36 | |
| depth (m) | temperature (degree C) | salinity | potential temperature (degree C) | sigma-theta (kg/m ³) | geopotential anomaly (m/s) ² | flag |
| 0 | 19.501 | 33.450 | 19.501 | 23.710 | 0. | 2 |
| 10 | 18.561 | 33.553 | 18.559 | 24.027 | 0.41 | 1 |
| 20 | 18.035 | 33.483 | 18.032 | 24.104 | 0.79 | 1 |
| 30 | 17.288 | 33.613 | 17.283 | 24.384 | 1.16 | 1 |
| 40 | 16.791 | 33.532 | 16.785 | 24.439 | 1.52 | 1 |
| 50 | 16.052 | 33.568 | 16.044 | 24.637 | 1.85 | 1 |
| 60 | 15.685 | 33.506 | 15.676 | 24.672 | 2.19 | 1 |
| 70 | 15.053 | 33.460 | 15.042 | 24.776 | 2.51 | 1 |
| 80 | 14.315 | 33.407 | 14.303 | 24.894 | 2.83 | 1 |
| 90 | 13.796 | 33.456 | 13.783 | 25.039 | 3.13 | 1 |
| 100 | 13.641 | 33.550 | 13.627 | 25.144 | 3.42 | 1 |
| 125 | 11.638 | 33.477 | 11.622 | 25.477 | 4.08 | 1 |
| 150 | 10.575 | 33.602 | 10.557 | 25.766 | 4.68 | 1 |
| 175 | 9.613 | 33.797 | 9.593 | 26.081 | 5.21 | 1 |
| 200 | 9.062 | 33.932 | 9.040 | 26.276 | 5.67 | 1 |
| 225 | 8.739 | 34.004 | 8.715 | 26.383 | 6.10 | 1 |
| 250 | 8.318 | 34.023 | 8.292 | 26.463 | 6.52 | 1 |
| 300 | 7.545 | 34.072 | 7.516 | 26.616 | 7.29 | 1 |

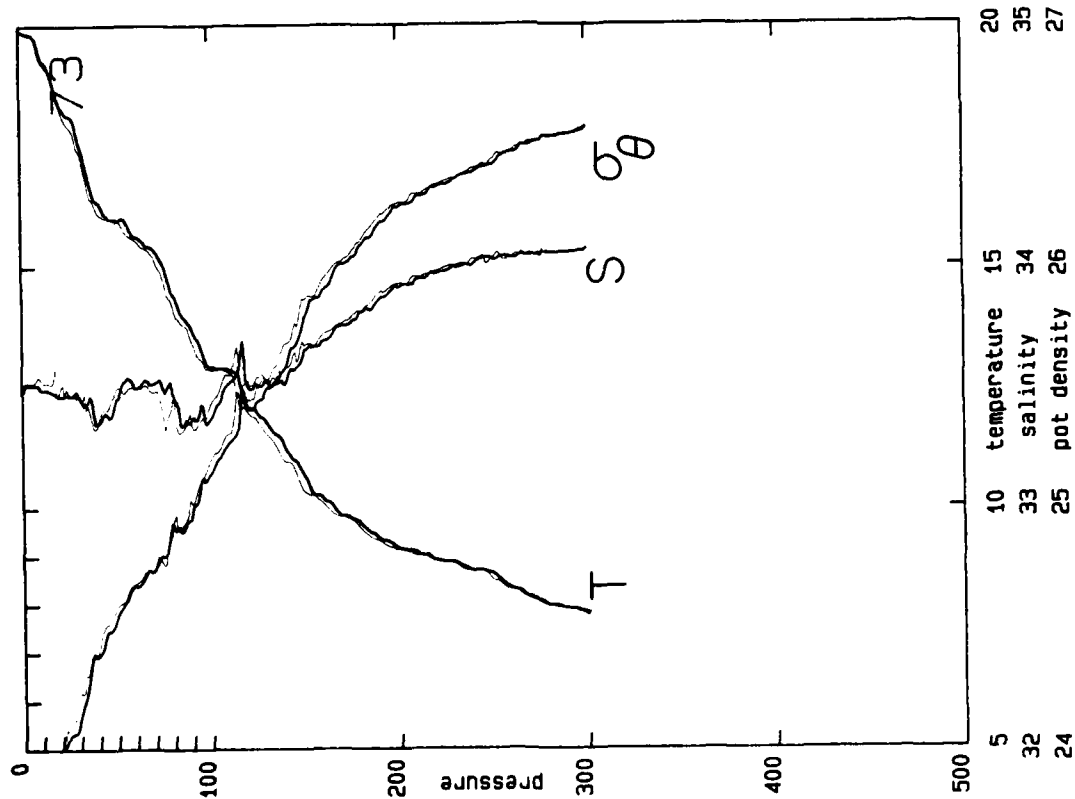
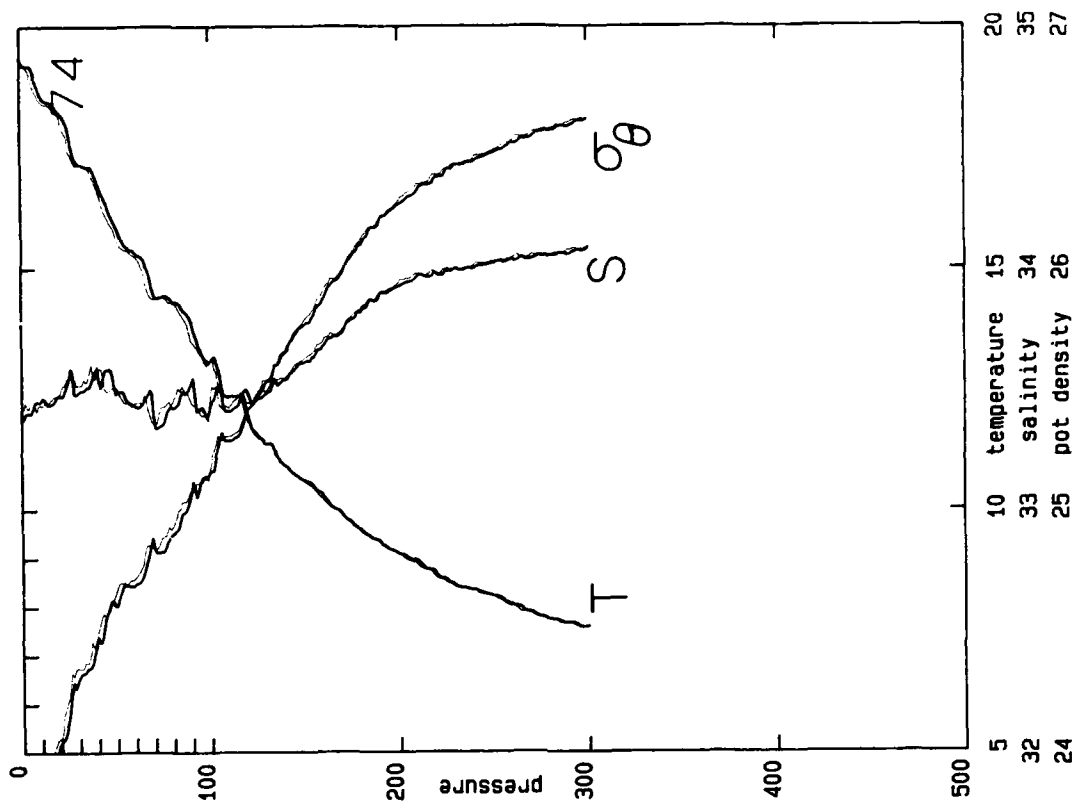


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 73 | 191:16:50 | 30 10.6 N | 119 9.3 W | 7 | 36 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 19.889 | 33.486 | 19.889 | 23.637 | 0. | 2 |
| 10 | 19.573 | 33.495 | 19.571 | 23.727 | 0.42 | 1 |
| 20 | 18.474 | 33.463 | 18.471 | 23.981 | 0.83 | 1 |
| 30 | 17.795 | 33.495 | 17.790 | 24.172 | 1.22 | 1 |
| 40 | 16.369 | 33.353 | 16.363 | 24.399 | 1.58 | 1 |
| 50 | 15.987 | 33.459 | 15.979 | 24.568 | 1.93 | 1 |
| 60 | 15.628 | 33.497 | 15.619 | 24.678 | 2.26 | 1 |
| 70 | 15.358 | 33.519 | 15.347 | 24.755 | 2.59 | 1 |
| 80 | 14.420 | 33.471 | 14.408 | 24.921 | 2.90 | 1 |
| 90 | 13.686 | 33.380 | 13.673 | 25.003 | 3.21 | 1 |
| 100 | 12.939 | 33.376 | 12.925 | 25.150 | 3.50 | 1 |
| 125 | 11.910 | 33.510 | 11.894 | 25.452 | 4.17 | 1 |
| 150 | 10.607 | 33.656 | 10.589 | 25.802 | 4.78 | 1 |
| 175 | 9.755 | 33.775 | 9.735 | 26.040 | 5.30 | 1 |
| 200 | 9.135 | 33.916 | 9.113 | 26.252 | 5.78 | 1 |
| 225 | 8.867 | 33.978 | 8.843 | 26.343 | 6.22 | 1 |
| 250 | 8.562 | 34.024 | 8.536 | 26.427 | 6.64 | 1 |
| 300 | 7.769 | 34.079 | 7.739 | 26.589 | 7.42 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 74 | 191:18: 5 | 30 17.3 N | 119 2.8 W | 6 | 3 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 19.251 | 33.378 | 19.251 | 23.719 | 0. | 2 |
| 10 | 18.674 | 33.449 | 18.672 | 23.920 | 0.41 | 1 |
| 20 | 18.239 | 33.473 | 18.236 | 24.046 | 0.81 | 1 |
| 30 | 17.172 | 33.487 | 17.167 | 24.315 | 1.18 | 1 |
| 40 | 16.824 | 33.552 | 16.817 | 24.447 | 1.54 | 1 |
| 50 | 15.882 | 33.473 | 15.874 | 24.603 | 1.88 | 1 |
| 60 | 15.315 | 33.435 | 15.306 | 24.700 | 2.21 | 1 |
| 70 | 14.426 | 33.353 | 14.416 | 24.828 | 2.53 | 1 |
| 80 | 14.315 | 33.426 | 14.303 | 24.908 | 2.84 | 1 |
| 90 | 13.861 | 33.536 | 13.848 | 25.088 | 3.14 | 1 |
| 100 | 13.120 | 33.447 | 13.106 | 25.169 | 3.43 | 1 |
| 125 | 11.492 | 33.465 | 11.476 | 25.495 | 4.10 | 1 |
| 150 | 10.591 | 33.613 | 10.573 | 25.771 | 4.70 | 1 |
| 175 | 9.684 | 33.790 | 9.664 | 26.064 | 5.23 | 1 |
| 200 | 9.080 | 33.929 | 9.058 | 26.271 | 5.70 | 1 |
| 225 | 8.498 | 33.995 | 8.475 | 26.413 | 6.13 | 1 |
| 250 | 8.200 | 34.024 | 8.174 | 26.482 | 6.54 | 1 |
| 300 | 7.595 | 34.092 | 7.566 | 26.624 | 7.30 | 1 |

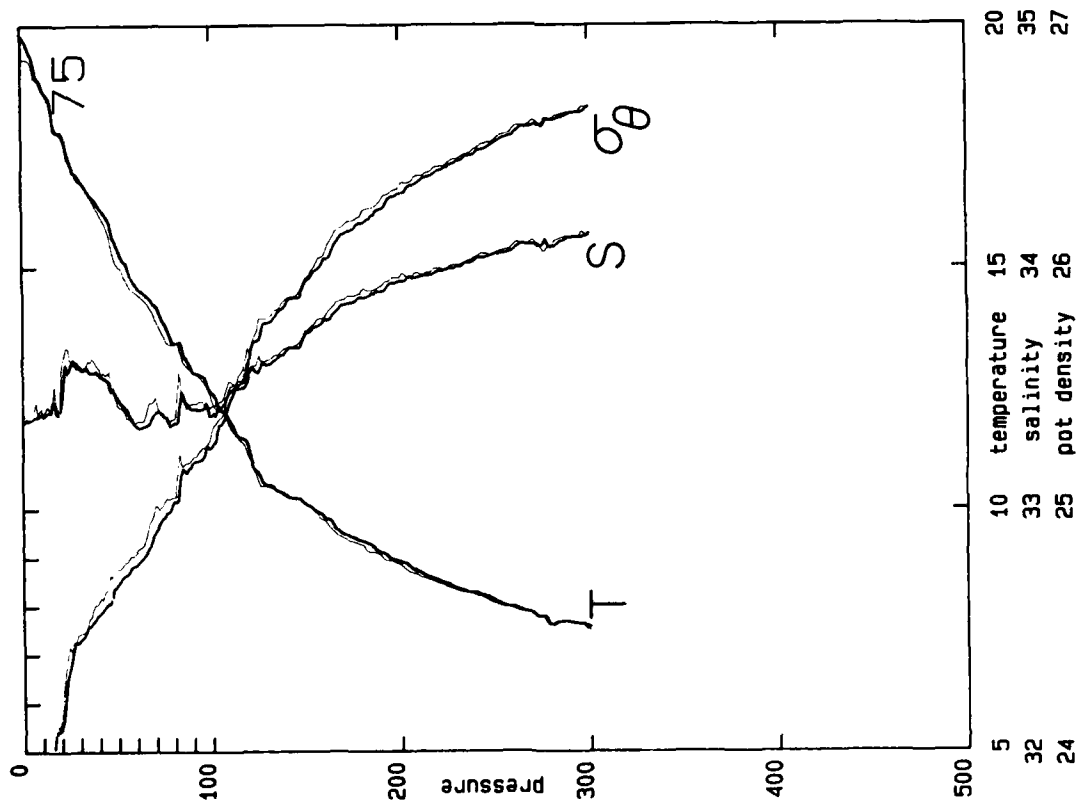
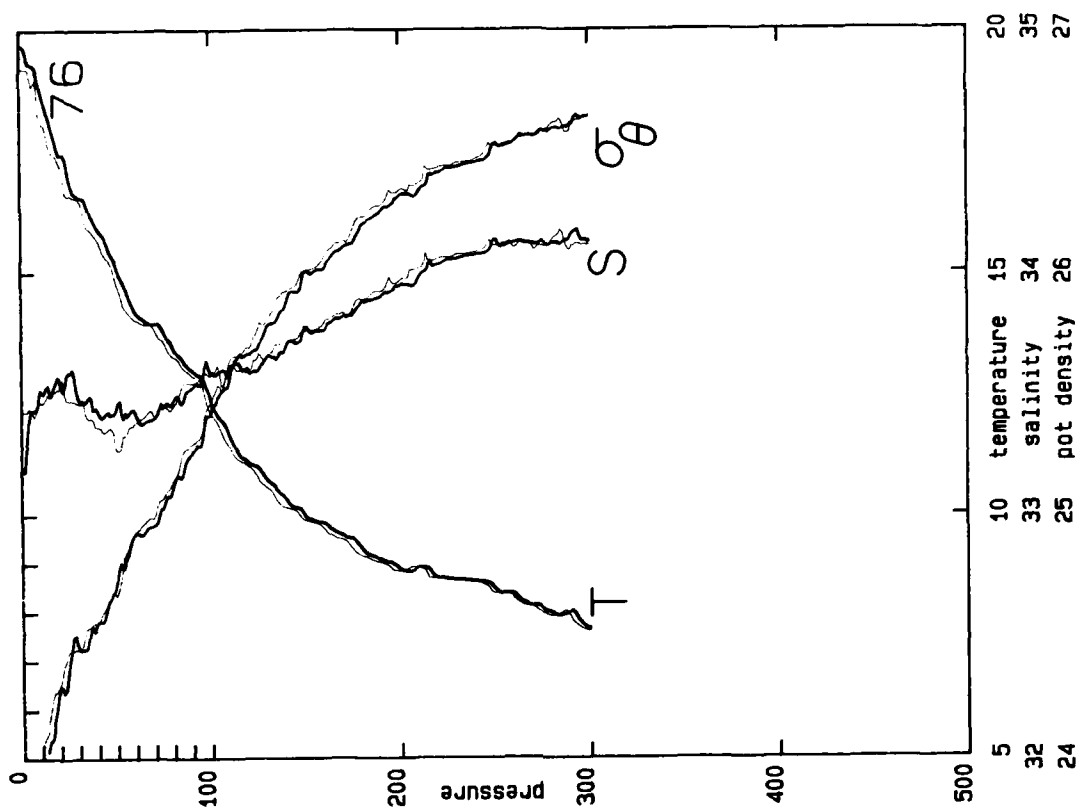


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 75 | 191:19:24 | 30 25.4 N | 118 56.2 W | 1 | 36 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 19.770 | 33.363 | 19.770 | 23.575 | 0. | 2 |
| 10 | 18.844 | 33.399 | 18.842 | 23.839 | 0.42 | 1 |
| 20 | 17.801 | 33.419 | 17.798 | 24.112 | 0.82 | 1 |
| 30 | 16.880 | 33.593 | 16.875 | 24.465 | 1.17 | 1 |
| 40 | 16.294 | 33.560 | 16.288 | 24.576 | 1.52 | 1 |
| 50 | 15.423 | 33.461 | 15.415 | 24.695 | 1.85 | 1 |
| 60 | 14.625 | 33.345 | 14.616 | 24.780 | 2.17 | 1 |
| 70 | 14.196 | 33.402 | 14.186 | 24.914 | 2.49 | 1 |
| 80 | 13.432 | 33.360 | 13.421 | 25.039 | 2.79 | 1 |
| 90 | 12.852 | 33.416 | 12.840 | 25.198 | 3.08 | 1 |
| 100 | 12.394 | 33.391 | 12.381 | 25.268 | 3.35 | 1 |
| 125 | 10.724 | 33.570 | 10.709 | 25.714 | 3.98 | 1 |
| 150 | 10.082 | 33.730 | 10.065 | 25.950 | 4.53 | 1 |
| 175 | 9.395 | 33.858 | 9.376 | 26.164 | 5.02 | 1 |
| 200 | 8.899 | 33.942 | 8.878 | 26.309 | 5.48 | 1 |
| 225 | 8.427 | 33.995 | 8.404 | 26.424 | 5.90 | 1 |
| 250 | 8.081 | 34.055 | 8.056 | 26.524 | 6.30 | 1 |
| 300 | 7.508 | 34.146 | 7.479 | 26.679 | 7.05 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 76 | 191:20:54 | 30 34.5 N | 118 50.0 W | 4 | 36 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 19.667 | 33.183 | 19.667 | 23.464 | 0. | 2 |
| 10 | 18.940 | 33.520 | 18.938 | 23.907 | 0.42 | 1 |
| 20 | 17.475 | 33.563 | 17.472 | 24.300 | 0.80 | 1 |
| 30 | 16.573 | 33.482 | 16.568 | 24.451 | 1.16 | 1 |
| 40 | 15.914 | 33.437 | 15.908 | 24.567 | 1.51 | 1 |
| 50 | 15.186 | 33.436 | 15.178 | 24.728 | 1.84 | 1 |
| 60 | 14.205 | 33.420 | 14.196 | 24.926 | 2.15 | 1 |
| 70 | 13.949 | 33.403 | 13.939 | 24.967 | 2.46 | 1 |
| 80 | 13.486 | 33.472 | 13.475 | 25.115 | 2.75 | 1 |
| 90 | 12.976 | 33.526 | 12.964 | 25.259 | 3.03 | 1 |
| 100 | 12.347 | 33.597 | 12.334 | 25.437 | 3.30 | 1 |
| 125 | 10.973 | 33.599 | 10.958 | 25.693 | 3.90 | 1 |
| 150 | 9.943 | 33.777 | 9.926 | 26.010 | 4.45 | 1 |
| 175 | 9.480 | 33.830 | 9.461 | 26.128 | 4.95 | 1 |
| 200 | 8.848 | 33.950 | 8.827 | 26.324 | 5.40 | 1 |
| 225 | 8.662 | 34.051 | 8.638 | 26.432 | 5.83 | 1 |
| 250 | 8.408 | 34.122 | 8.382 | 26.527 | 6.23 | 1 |
| 300 | 7.617 | 34.118 | 7.587 | 26.642 | 6.99 | 1 |

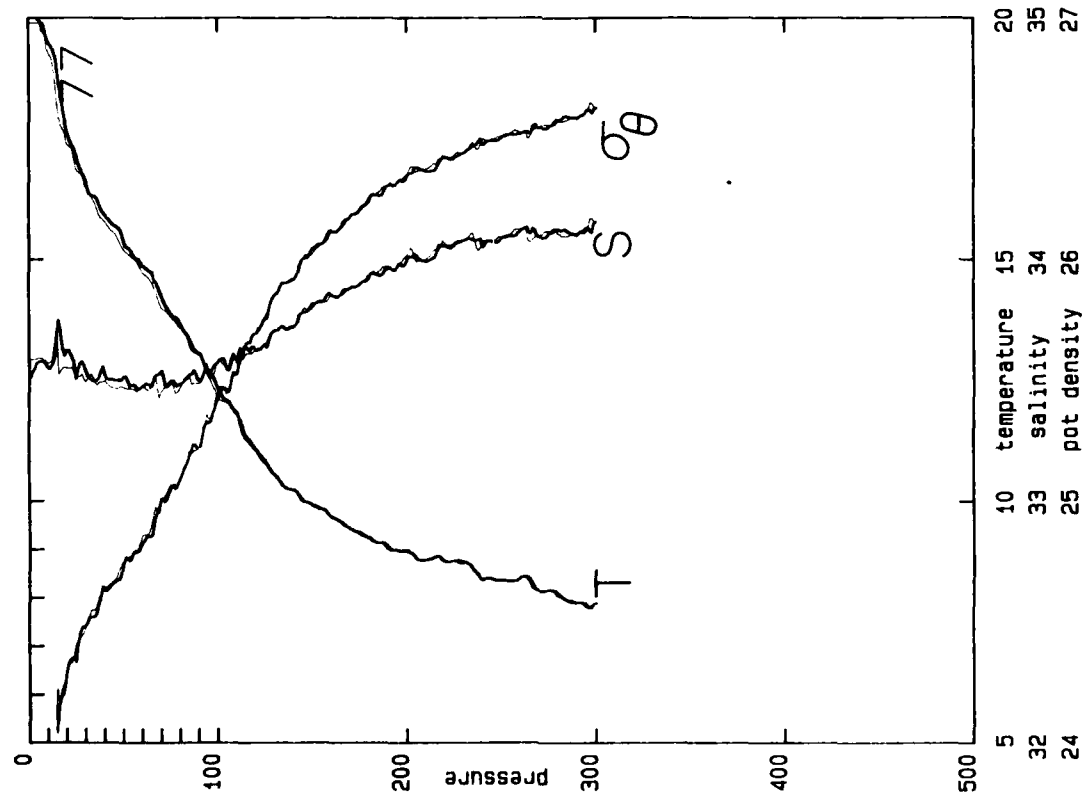
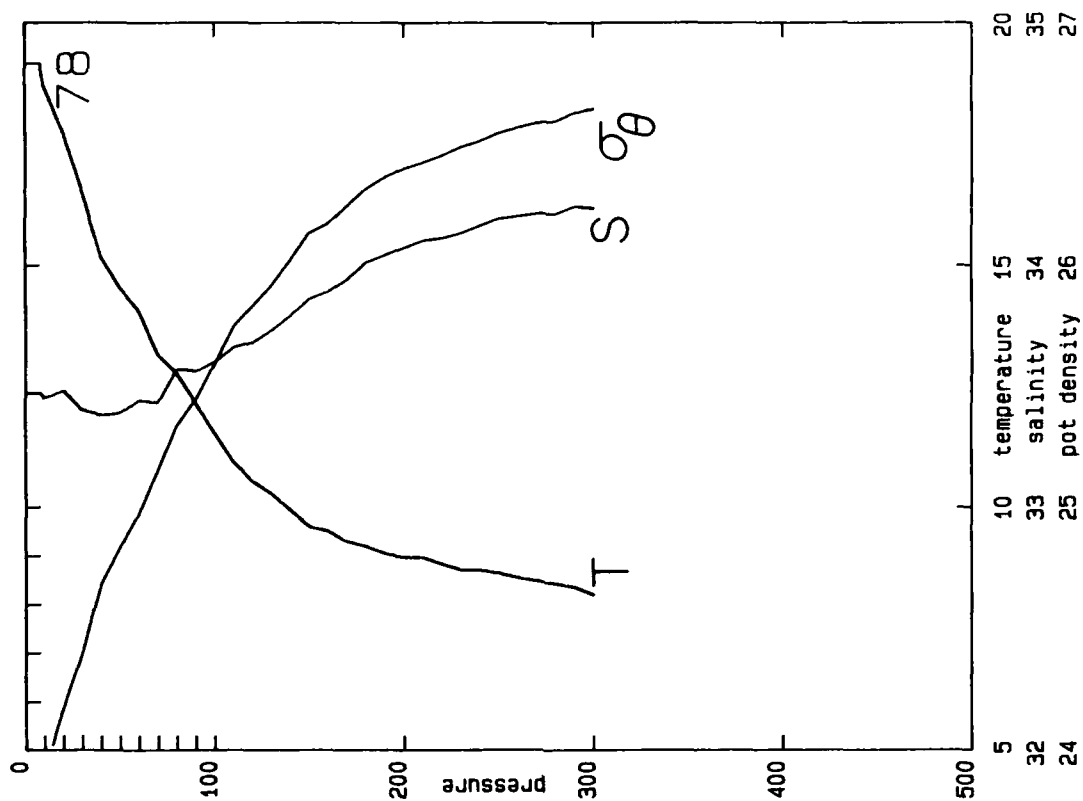


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|--------------|---------------------------|-----------|--|-------------------------------------|---|------|
| 77 | 191:22:17 | 30 43.1 N | 118 42.3 W | 1 | 19 | |
| depth (m) | temperature (degree C) | salinity | potential temperature (degree C) | sigma-theta (kg/m ³) | geopotential anomaly (m/s) ² | flag |
| 0 | 20.102 | 33.513 | 20.102 | 23.602 | 0. | 2 |
| 10 | 19.504 | 33.550 | 19.502 | 23.786 | 0.42 | 1 |
| 20 | 17.684 | 33.622 | 17.681 | 24.296 | 0.81 | 1 |
| 30 | 16.606 | 33.532 | 16.601 | 24.482 | 1.17 | 1 |
| 40 | 15.918 | 33.519 | 15.912 | 24.629 | 1.51 | 1 |
| 50 | 15.353 | 33.524 | 15.345 | 24.759 | 1.84 | 1 |
| 60 | 14.849 | 33.475 | 14.840 | 24.832 | 2.15 | 1 |
| 70 | 14.208 | 33.542 | 14.198 | 25.020 | 2.46 | 1 |
| 80 | 13.629 | 33.489 | 13.618 | 25.099 | 2.76 | 1 |
| 90 | 13.028 | 33.490 | 13.016 | 25.221 | 3.04 | 1 |
| 100 | 12.276 | 33.577 | 12.263 | 25.435 | 3.30 | 1 |
| 125 | 10.801 | 33.645 | 10.786 | 25.759 | 3.91 | 1 |
| 150 | 9.880 | 33.817 | 9.863 | 26.052 | 4.44 | 1 |
| 175 | 9.312 | 33.900 | 9.293 | 26.210 | 4.92 | 1 |
| 200 | 8.925 | 34.011 | 8.904 | 26.359 | 5.36 | 1 |
| 225 | 8.761 | 34.069 | 8.737 | 26.431 | 5.78 | 1 |
| 250 | 8.340 | 34.089 | 8.314 | 26.512 | 6.18 | 1 |
| 300 | 7.891 | 34.154 | 7.861 | 26.630 | 6.94 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|--------------|---------------------------|----------|--|-------------------------------------|---|------|
| 78 | 192: 0:22 | 31 1.8 N | 118 39.8 W | 4 | 36 | |
| depth (m) | temperature (degree C) | salinity | potential temperature (degree C) | sigma-theta (kg/m ³) | geopotential anomaly (m/s) ² | flag |
| 0 | 19.417 | 33.470 | 19.417 | 23.747 | 0. | 2 |
| 10 | 18.711 | 33.440 | 18.709 | 23.903 | 0.41 | 1 |
| 20 | 17.754 | 33.470 | 17.751 | 24.162 | 0.80 | 1 |
| 30 | 16.541 | 33.390 | 16.536 | 24.388 | 1.17 | 1 |
| 40 | 15.200 | 33.370 | 15.194 | 24.674 | 1.51 | 1 |
| 50 | 14.544 | 33.380 | 14.537 | 24.823 | 1.83 | 1 |
| 60 | 14.061 | 33.430 | 14.052 | 24.964 | 2.14 | 1 |
| 70 | 13.147 | 33.420 | 13.137 | 25.142 | 2.43 | 1 |
| 80 | 12.777 | 33.560 | 12.766 | 25.324 | 2.71 | 1 |
| 90 | 12.169 | 33.550 | 12.157 | 25.434 | 2.97 | 1 |
| 100 | 11.543 | 33.590 | 11.530 | 25.582 | 3.22 | 1 |
| 125 | 10.423 | 33.695 | 10.408 | 25.864 | 3.79 | 1 |
| 150 | 9.618 | 33.850 | 9.601 | 26.121 | 4.30 | 1 |
| 175 | 9.260 | 33.965 | 9.241 | 26.270 | 4.77 | 1 |
| 200 | 8.985 | 34.060 | 8.963 | 26.388 | 5.20 | 1 |
| 225 | 8.784 | 34.110 | 8.760 | 26.459 | 5.61 | 1 |
| 250 | 8.656 | 34.180 | 8.629 | 26.535 | 6.01 | 1 |
| 300 | 8.211 | 34.220 | 8.180 | 26.635 | 6.76 | 1 |

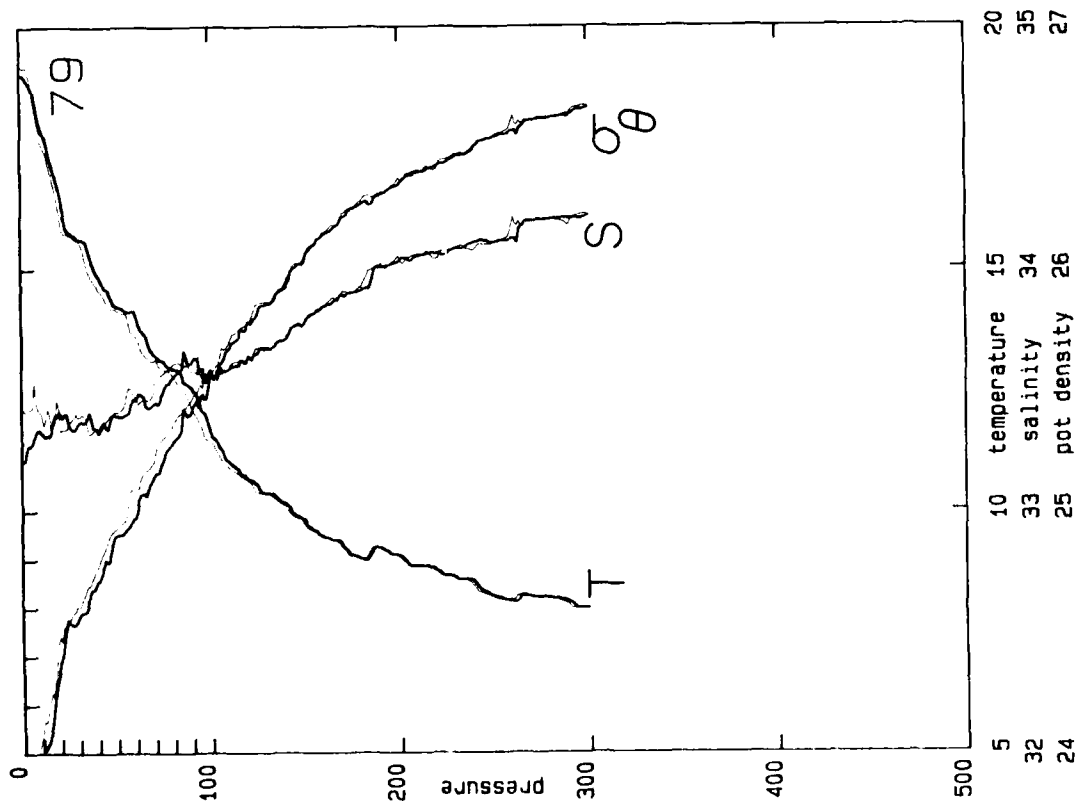
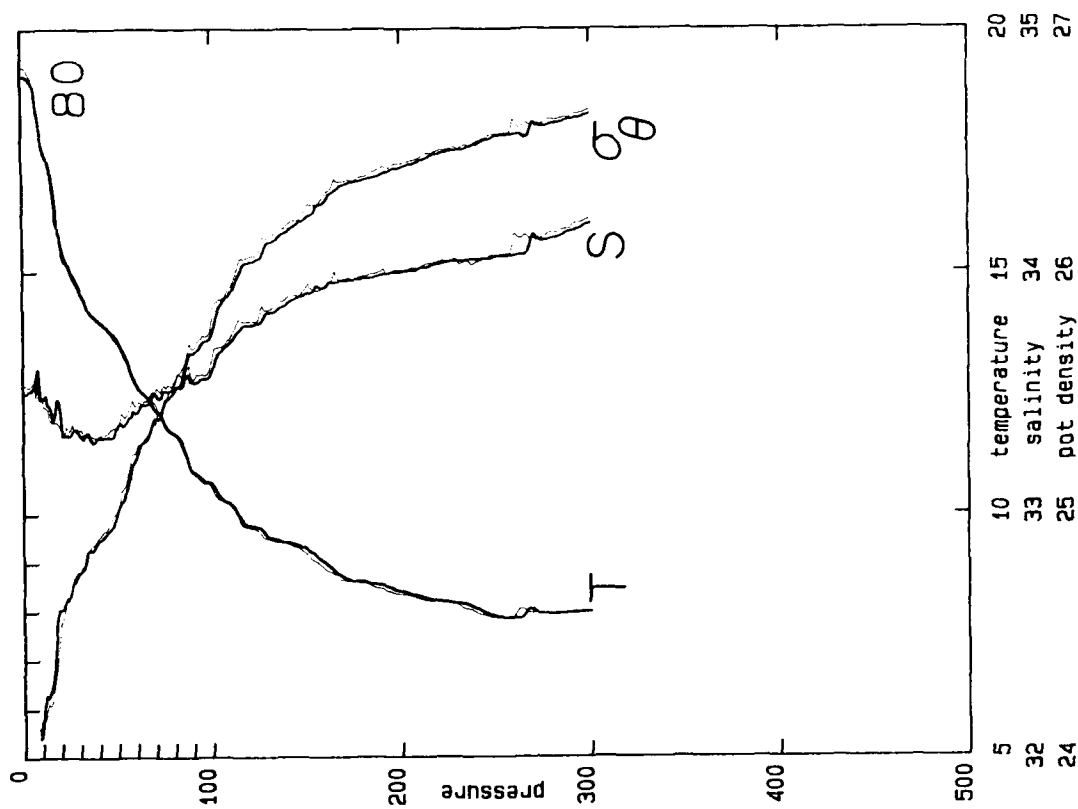


RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|----------|--------------------------|----------------------|----------------------------|------|
| 79 | 192: 1:24 | 31 8.0 N | 118 37.7 W | 2 | 9 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 19.017 | 33.211 | 19.017 | 23.651 | 0. | 2 |
| 10 | 18.005 | 33.331 | 18.003 | 23.995 | 0.41 | 1 |
| 20 | 16.650 | 33.411 | 16.647 | 24.378 | 0.79 | 1 |
| 30 | 15.650 | 33.363 | 15.645 | 24.569 | 1.13 | 1 |
| 40 | 14.892 | 33.333 | 14.886 | 24.712 | 1.47 | 1 |
| 50 | 14.224 | 33.394 | 14.217 | 24.902 | 1.78 | 1 |
| 60 | 14.110 | 33.455 | 14.101 | 24.973 | 2.09 | 1 |
| 70 | 13.220 | 33.446 | 13.210 | 25.148 | 2.38 | 1 |
| 80 | 12.928 | 33.554 | 12.917 | 25.290 | 2.66 | 1 |
| 90 | 12.532 | 33.623 | 12.520 | 25.421 | 2.92 | 1 |
| 100 | 11.590 | 33.592 | 11.577 | 25.575 | 3.17 | 1 |
| 125 | 10.474 | 33.662 | 10.459 | 25.829 | 3.76 | 1 |
| 150 | 9.697 | 33.799 | 9.680 | 26.068 | 4.28 | 1 |
| 175 | 9.050 | 33.898 | 9.031 | 26.251 | 4.75 | 1 |
| 200 | 9.043 | 34.038 | 9.021 | 26.362 | 5.19 | 1 |
| 225 | 8.642 | 34.065 | 8.618 | 26.446 | 5.61 | 1 |
| 250 | 8.195 | 34.109 | 8.169 | 26.549 | 6.01 | 1 |
| 300 | 7.967 | 34.219 | 7.937 | 26.670 | 6.74 | 1 |

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--------------------------|----------------------|----------------------------|------|
| 80 | 192: 2:38 | 31 16.8 N | 118 37.3 W | 2 | 8 | |
| depth | temperature | salinity | potential temperature | sigma-theta | geopotential anomaly | flag |
| (m) | (degree C) | | (degree C) | (kg/m ³) | (m/s) ² | |
| 0 | 19.034 | 33.501 | 19.034 | 23.868 | 0. | 2 |
| 10 | 17.683 | 33.454 | 17.681 | 24.167 | 0.40 | 1 |
| 20 | 15.638 | 33.405 | 15.635 | 24.604 | 0.75 | 1 |
| 30 | 14.608 | 33.327 | 14.604 | 24.768 | 1.08 | 1 |
| 40 | 13.971 | 33.318 | 13.965 | 24.895 | 1.39 | 1 |
| 50 | 13.547 | 33.365 | 13.540 | 25.019 | 1.70 | 1 |
| 60 | 12.669 | 33.417 | 12.661 | 25.234 | 1.98 | 1 |
| 70 | 12.112 | 33.491 | 12.103 | 25.398 | 2.25 | 1 |
| 80 | 11.637 | 33.524 | 11.627 | 25.513 | 2.50 | 1 |
| 90 | 10.857 | 33.545 | 10.846 | 25.670 | 2.74 | 1 |
| 100 | 10.584 | 33.594 | 10.572 | 25.757 | 2.98 | 1 |
| 125 | 9.699 | 33.790 | 9.685 | 26.060 | 3.49 | 1 |
| 150 | 9.258 | 33.911 | 9.242 | 26.227 | 3.97 | 1 |
| 175 | 8.611 | 33.966 | 8.593 | 26.373 | 4.40 | 1 |
| 200 | 8.383 | 33.999 | 8.362 | 26.434 | 4.82 | 1 |
| 225 | 8.167 | 34.041 | 8.144 | 26.499 | 5.22 | 1 |
| 250 | 7.862 | 34.061 | 7.837 | 26.561 | 5.61 | 1 |
| 300 | 7.980 | 34.201 | 7.950 | 26.654 | 6.35 | 1 |



AD-A174 002

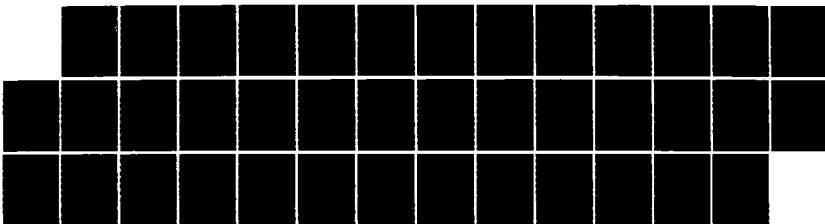
FRONTS CRUISE: LEG I: 11 JULY 1985 LEG II: 12-23 JULY
1985(U) SCRIPPS INSTITUTION OF OCEANOGRAPHY LA JOLLA CA
L R MAURY ET AL. OCT 86 SIO-REF-86-23 N00014-85-C-0104

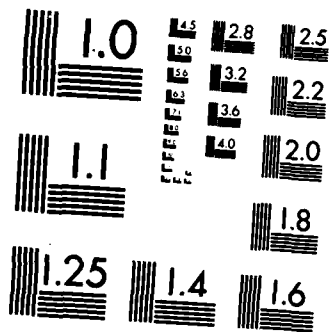
2/2

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F/G 8/3

NL



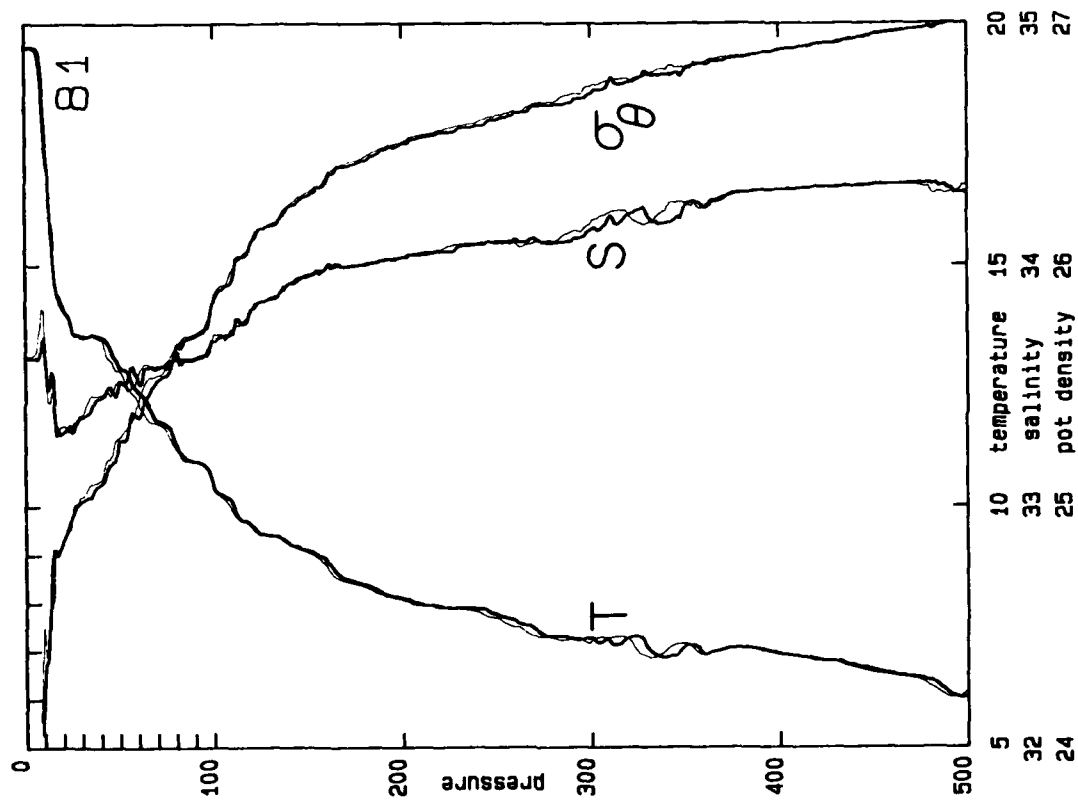


MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

RV NEW HORIZON

FRONTS I

| station | date:time julian: GMT | latitude | longitude | wind speed knots | wind direction WMO code | |
|---------|--------------------------|-----------|--|-------------------------------------|---|------|
| 81 | 192: 3:46 | 31 25.8 N | 118 36.8 W | 1 | 3 | |
| depth | temperature | salinity | potential temperature (degree C) | sigma-theta (kg/m ³) | geopotential anomaly (m/s) ² | flag |
| (m) | (degree C) | | | | | |
| 0 | 19.512 | 33.615 | 19.512 | 23.833 | 0. | 2 |
| 10 | 18.123 | 33.700 | 18.121 | 24.248 | 0.40 | 1 |
| 20 | 14.073 | 33.305 | 14.070 | 24.864 | 0.73 | 1 |
| 30 | 13.535 | 33.371 | 13.531 | 25.025 | 1.03 | 1 |
| 40 | 13.507 | 33.452 | 13.501 | 25.094 | 1.32 | 1 |
| 50 | 12.892 | 33.502 | 12.885 | 25.256 | 1.60 | 1 |
| 60 | 12.353 | 33.519 | 12.345 | 25.374 | 1.87 | 1 |
| 70 | 11.766 | 33.573 | 11.757 | 25.527 | 2.12 | 1 |
| 80 | 11.253 | 33.644 | 11.243 | 25.676 | 2.37 | 1 |
| 90 | 10.926 | 33.613 | 10.915 | 25.711 | 2.60 | 1 |
| 100 | 10.361 | 33.707 | 10.349 | 25.883 | 2.82 | 1 |
| 125 | 9.419 | 33.849 | 9.405 | 26.152 | 3.33 | 1 |
| 150 | 9.062 | 33.956 | 9.046 | 26.294 | 3.79 | 1 |
| 175 | 8.425 | 33.995 | 8.407 | 26.424 | 4.21 | 1 |
| 200 | 8.074 | 34.031 | 8.054 | 26.505 | 4.61 | 1 |
| 225 | 7.884 | 34.054 | 7.862 | 26.552 | 4.99 | 1 |
| 250 | 7.703 | 34.093 | 7.678 | 26.609 | 5.37 | 1 |
| 300 | 7.225 | 34.152 | 7.196 | 26.724 | 6.08 | 1 |
| 400 | 6.903 | 34.308 | 6.865 | 26.892 | 7.38 | 1 |
| 500 | 6.123 | 34.314 | 6.079 | 27.001 | 8.55 | 1 |



FRONTS LEG II
STATION AND CAST DESCRIPTION

| Sta. | Cast | Date 1985 | Cast Type | Latitude ° N | Longitude ° W | Time GMT | Remarks | CalCOFI | |
|------|------|--------------|--------------|-----------------|------------------|-------------|---------------------|---------|-----------------------|
| | | | | | | | | Line | Station (computed) |
| 1 | 1 | 13 Jul 85 | Nis | 31°08.2' | 121°11.1' | 1840 | 6 Btle prodo | 92.9 | 83.3 |
| 2 | 4 | 14 Jul 85 | Nan | 30°49.7' | 121°23.0' | 0208 | 20 Btle sp chlor | 93.8 | 87.9 |
| 2 | 8 | 14 Jul 85 | Nan | 30°49.2' | 121°18.0' | 1100 | 20 Btle hydro | 94.0 | 87.0 |
| 2 | 9 | 14 Jul 85 | Nan | 30°50.2' | 121°20.2' | 1329 | 12 Btle phyto | 93.9 | 87.3 |
| 2 | 10 | 14 Jul 85 | Nan | 30°50.3' | 121°19.5' | 1607 | 20 Btle hydro | 93.9 | 87.1 |
| 2 | 11 | 14 Jul 85 | Nis | 30°50.2' | 121°19.8' | 1827 | 8 Btle prodo-CICESE | 93.9 | 87.2 |
| 2 | 12 | 14 Jul 85 | Nis | 30°50.9' | 121°19.9' | 1906 | 6 Btle prodo | 93.8 | 87.1 |
| 3 | 4 | 15 Jul 85 | Nan | 31°08.2' | 121°10.8' | 1103 | 20 Btle hydro | 92.9 | 83.2 |
| 4 | 1 | 15 Jul 85 | Nan | 31°20.2' | 121°03.4' | 1358 | 20 Btle hydro | 92.3 | 80.3 |
| 5 | 1 | 15 Jul 85 | Nis | 31°35.7' | 120°55.2' | 1709 | 8 Btle prodo-CICESE | 91.5 | 76.8 |
| 5 | 2 | 15 Jul 85 | Nan | 31°35.6' | 120°55.5' | 1800 | 20 Btle hydro | 91.5 | 76.9 |
| 5 | 3 | 15 Jul 85 | Nis | 31°35.8' | 120°55.8' | 1858 | 6 Btle prodo | 91.5 | 76.9 |
| 6 | 1 | 15 Jul 85 | Nan | 31°44.8' | 120°50.1' | 2245 | 20 Btle hydro | 91.0 | 74.7 |
| 7 | 4 | 16 Jul 85 | Nan | 31°54.8' | 120°45.3' | 0310 | 20 Btle hydro | 90.5 | 72.6 |
| 8 | 1 | 16 Jul 85 | Nan | 32°08.9' | 120°36.3' | 0614 | 20 Btle hydro | 89.8 | 69.1 |
| 9 | 4 | 16 Jul 85 | Nan | 32°20.8' | 120°31.2' | 1115 | 20 Btle hydro | 89.1 | 66.7 |
| 10 | 1 | 16 Jul 85 | Nan | 32°40.1' | 120°20.0' | 1442 | 20 Btle hydro | 88.1 | 62.2 |
| 10 | 2 | 16 Jul 85 | Nis | 32°38.7' | 120°21.8' | 1704 | 6 Btle prodo-CICESE | 88.2 | 62.7 |
| 10 | 3 | 16 Jul 85 | Nis | 32°38.0' | 120°21.7' | 1813 | 6 Btle prodo | 88.2 | 62.8 |
| 10 | 8 | 17 Jul 85 | Nan | 32°40.1' | 120°19.8' | 0137 | 12 Btle phyto | 88.1 | 62.2 |
| 10 | 11 | 17 Jul 85 | Nan | 32°40.0' | 120°20.5' | 1006 | 20 Btle hydro | 88.1 | 62.3 |
| 11 | 2 | 17 Jul 85 | Nan | 32°21.6' | 120°32.0' | 1413 | 20 Btle hydro | 89.0 | 66.8 |
| 12 | 1 | 17 Jul 85 | Nis | 32°10.0' | 120°36.7' | 1647 | 8 Btle prodo-CICESE | 89.7 | 69.1 |
| 12 | 2 | 17 Jul 85 | Nan | 32°09.8' | 120°37.3' | 1738 | 20 Btle hydro | 89.7 | 69.2 |
| 12 | 3 | 17 Jul 85 | Nis | 32°09.7' | 120°37.8' | 1823 | 6 Btle prodo | 89.7 | 69.3 |
| 13 | 2 | 17 Jul 85 | Nan | 31°54.6' | 120°44.6' | 2226 | 20 Btle hydro | 90.5 | 72.5 |
| 14 | 2 | 18 Jul 85 | Nan | 31°44.7' | 120°50.6' | 0124 | 20 Btle hydro | 91.0 | 74.8 |
| 15 | 2 | 18 Jul 85 | Nan | 31°34.9' | 120°55.8' | 0409 | 20 Btle hydro | 91.5 | 77.0 |
| 16 | 2 | 18 Jul 85 | Nan | 31°21.1' | 121°03.8' | 0742 | 20 Btle hydro | 92.3 | 80.3 |
| 17 | 2 | 18 Jul 85 | Nan | 31°08.2' | 121°10.2' | 1105 | 20 Btle hydro | 93.0 | 83.1 |
| 18 | 1 | 18 Jul 85 | Nan | 30°49.7' | 121°19.3' | 1424 | 20 Btle hydro | 93.9 | 87.2 |
| 18 | 2 | 18 Jul 85 | Nis | 30°49.6' | 121°20.6' | 1650 | 8 Btle prodo-CICESE | 93.9 | 87.4 |
| 18 | 4 | 18 Jul 85 | Nis | 30°47.9' | 121°19.2' | 1904 | 6 Btle prodo | 94.1 | 87.4 |
| 18 | 6 | 19 Jul 85 | Nan | 30°50.2' | 121°20.5' | 0123 | 11 Btle phyto | 93.9 | 87.3 |
| 18 | 9 | 19 Jul 85 | Nan | 30°49.7' | 121°19.9' | 0903 | 20 Btle hydro | 93.9 | 87.3 |
| 19 | 2 | 19 Jul 85 | Nan | 31°08.2' | 121°10.5' | 1308 | 20 Btle hydro | 92.9 | 83.2 |
| 20 | 2 | 19 Jul 85 | Nis | 31°21.8' | 121°03.2' | 1636 | 8 Btle prodo-CICESE | 92.2 | 80.1 |
| 20 | 3 | 19 Jul 85 | Nan | 31°22.0' | 121°03.5' | 1727 | 20 Btle hydro | 92.2 | 80.1 |
| 20 | 4 | 19 Jul 85 | Nis | 31°22.4' | 121°03.8' | 1819 | 6 Btle prodo | 92.2 | 80.1 |
| 21 | 1 | 19 Jul 85 | Nan | 31°35.3' | 120°55.2' | 2009 | 11 Btle phyto | 91.5 | 76.9 |
| 21 | 3 | 19 Jul 85 | Nan | 31°35.0' | 120°56.2' | 2138 | 20 Btle hydro | 91.5 | 77.1 |
| 22 | 1 | 19 Jul 85 | Nan | 31°44.8' | 120°49.8' | 2342 | 11 Btle phyto | 91.1 | 74.7 |
| 22 | 3 | 20 Jul 85 | Nan | 31°44.8' | 120°50.8' | 0116 | 20 Btle hydro | 91.0 | 74.9 |

FRONTS LEG II
STATION AND CAST DESCRIPTION

| Sta. | Cast | Date 1985 | Cast Type | Latitude ° N | Longitude ° W | Time GMT | Remarks | CalCOFI Line Station (computed) |
|------|------|--------------|--------------|-----------------|------------------|-------------|---------------|---------------------------------------|
| 23 | 1 | 20 Jul 85 | Nan | 31 ° 55.2 ' | 120 ° 44.3 ' | 0321 | 11 Btle phyto | 90.5 72.3 |
| 23 | 3 | 20 Jul 85 | Nan | 31 ° 54.7 ' | 120 ° 46.0 ' | 0448 | 20 Btle hydro | 90.5 72.7 |
| 24 | 2 | 20 Jul 85 | Nan | 32 ° 09.3 ' | 120 ° 38.3 ' | 0835 | 20 Btle hydro | 89.7 69.5 |

RV NEW HORIZON

FRONTS LEG II

STATION 9 4

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD | AMT | TYPE | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-------|------|-------|-------|-------|
| 32 20.8 N | 120 31.2 W | 16/07/85 | 1115 GMT | | | | 330 03 | 2 | 1013.2 MB | 14.4 C | 13.5 C | %8 | | SC | | |
| CST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SVA | DYN HT | OXYGEN | OXY | SI03 | P04 | N03 | N02 | CHL-A | PHAEO | PRESS |
| | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | D.BAR |
| 1 | 0 ISL | 16.60 | 16.60 | 33.263 | 24.276 | 363.8 | .000 | 5.76 | 103.4 | | | | | | | 0 |
| 1 | 1 | 16.60 | 16.60 | 33.263 | 24.276 | 363.8 | .004 | 5.76 | 103.4 | 1.4 | .43 | .4 | .00 | .14 | .03 | 1 |
| 1 | 10 ISL | 16.58 | 16.58 | 33.261 | 24.279 | 363.7 | .036 | 5.80 | 104.1 | | | | | | | 10 |
| 1 | 11 | 16.58 | 16.58 | 33.261 | 24.279 | 363.7 | .040 | 5.81 | 104.3 | 1.4 | .42 | .4 | .00 | .13 | .03 | 11 |
| 1 | 20 ISL | 15.85 | 15.84 | 33.302 | 24.478 | 345.2 | .072 | 5.96 | 105.5 | | | | | | | 20 |
| 1 | 30 ISL | 14.86 | 14.85 | 33.344 | 24.728 | 321.6 | .105 | 6.11 | 105.9 | | | | | | | 30 |
| 1 | 32 | 14.65 | 14.64 | 33.352 | 24.779 | 316.8 | .111 | 6.13 | 105.9 | 2.2 | .49 | .4 | .00 | .19 | .03 | 32 |
| 1 | 42 | 14.04 | 14.04 | 33.325 | 24.886 | 308.8 | .142 | 6.10 | 104.1 | 2.2 | .43 | .4 | .00 | .22 | .05 | 42 |
| 1 | 50 ISL | 13.45 | 13.44 | 33.305 | 24.993 | 296.9 | .167 | 6.08 | 102.5 | | | | | | | 50 |
| 1 | 52 | 13.30 | 13.30 | 33.301 | 25.019 | 294.4 | .172 | 6.08 | 102.2 | 2.7 | .50 | 1.0 | .05 | .22 | .07 | 52 |
| 1 | 62 | 12.40 | 12.40 | 33.310 | 25.202 | 277.1 | .201 | 5.84 | 96.3 | 4.2 | .72 | 4.4 | .32 | .22 | .13 | 62 |
| 1 | 72 | 12.07 | 12.06 | 33.314 | 25.269 | 271.0 | .228 | 5.62 | 92.0 | 4.9 | .75 | 5.2 | .16 | .26 | .14 | 72 |
| 1 | 75 ISL | 11.99 | 11.98 | 33.317 | 25.287 | 269.4 | .237 | 5.57 | 91.0 | | | | | | | 76 |
| 1 | 83 | 11.81 | 11.80 | 33.346 | 25.343 | 264.2 | .257 | 5.43 | 88.4 | 6.5 | .85 | 7.0 | .09 | .20 | .13 | 83 |
| 1 | 91 | 11.57 | 11.56 | 33.468 | 25.482 | 251.2 | .283 | 5.08 | 82.4 | 9.0 | 1.07 | 10.8 | .04 | .13 | .16 | 93 |
| 1 | 106 ISL | 11.34 | 11.35 | 33.502 | 25.547 | 245.2 | .301 | 4.89 | 78.9 | | | | | | | 101 |
| 1 | 103 | 11.28 | 11.26 | 33.510 | 25.569 | 243.1 | .307 | 4.82 | 77.7 | 11.1 | 1.18 | 12.7 | .03 | .09 | .10 | 103 |
| 1 | 114 | 10.51 | 10.52 | 33.645 | 25.806 | 220.8 | .344 | 4.20 | 66.7 | 16.3 | 1.36 | 16.3 | .03 | .08 | .09 | 119 |
| 1 | 125 ISL | 10.26 | 10.26 | 33.681 | 25.878 | 214.1 | .359 | 4.05 | 64.0 | | | | .02 | .04 | .04 | 126 |
| 1 | 135 | 9.99 | 9.97 | 33.720 | 25.958 | 206.6 | .376 | 3.89 | 61.0 | 20.4 | 1.56 | 19.2 | .02 | .04 | .04 | 134 |
| 1 | 150 ISL | 9.50 | 9.48 | 33.810 | 26.110 | 192.4 | .409 | 3.43 | 53.2 | | | | | | | 151 |
| 1 | 159 | 9.27 | 9.25 | 33.855 | 26.181 | 185.7 | .427 | 3.20 | 49.5 | 28.3 | 1.91 | 24.2 | .01 | .01 | .05 | 160 |
| 1 | 185 | 8.79 | 8.77 | 33.936 | 26.322 | 172.7 | .473 | 3.00 | 45.9 | 32.7 | 2.06 | 26.4 | .01 | .00 | .02 | 186 |
| 1 | 200 ISL | 8.57 | 8.55 | 33.976 | 26.387 | 166.8 | .499 | 2.91 | 44.3 | | | | | | | 201 |
| 1 | 209 | 8.45 | 8.43 | 33.997 | 26.422 | 163.6 | .513 | 2.85 | 43.3 | 36.6 | 2.17 | 27.8 | .01 | | | 210 |
| 1 | 250 ISL | 7.93 | 7.90 | 34.056 | 26.562 | 150.8 | .578 | 2.37 | 35.5 | | | | | | | 252 |
| 1 | 300 ISL | 7.16 | 7.13 | 34.100 | 26.692 | 135.0 | .650 | 1.72 | 25.4 | | | | | | | 302 |
| 1 | 311 | 7.03 | 7.00 | 34.106 | 26.715 | 136.9 | .666 | 1.57 | 23.1 | 57.5 | 2.76 | 35.2 | .01 | | | 313 |
| 1 | 400 ISL | 6.50 | 6.46 | 34.184 | 26.848 | 125.2 | .782 | .79 | 11.4 | | | | | | | 403 |
| 1 | 419 | 6.43 | 6.42 | | | | .805 | .67 | 9.7 | 72.1 | 3.14 | 38.9 | .01 | | | 421 |
| 1 | 500 ISL | 6.04 | 6.00 | 34.271 | 26.977 | 114.1 | .902 | .42 | 6.0 | | | | | | | 504 |
| 1 | 521 | 5.94 | 5.90 | 34.288 | 27.003 | 111.8 | .926 | .39 | 5.6 | 82.3 | 3.32 | 41.0 | .01 | | | 525 |
| 1 | 600 ISL | 5.58 | 5.53 | 34.330 | 27.087 | 105.0 | 1.011 | .36 | 5.1 | | | | | | | 605 |
| 1 | 700 ISL | 5.15 | 5.09 | 34.370 | 27.166 | 97.6 | 1.113 | .32 | 4.5 | | | | | | | 706 |
| 1 | 780 | 4.92 | 4.76 | 34.394 | 27.227 | 92.7 | 1.189 | .29 | 4.1 | 104.9 | 3.52 | 43.8 | .00 | | | 786 |
| 1 | 800 ISL | 4.75 | 4.68 | 34.401 | 27.237 | 91.4 | 1.207 | .30 | 4.1 | | | | | | | 807 |
| 1 | 1000 ISL | 4.07 | 3.99 | 34.470 | 27.365 | 80.0 | 1.379 | .48 | 6.6 | | | | | | | 1009 |
| 1 | 1043 | 3.94 | 3.86 | 34.483 | 27.389 | 77.8 | 1.413 | .55 | 7.5 | 123.0 | 3.51 | 44.6 | .00 | | | 1052 |

RV NEW HORIZON

FRONTS LEG II

STATION 10 1

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD | AMT | TYPE | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-------|------|-------|-------|-------|
| 32 40.1 N | 120 20.0 W | 16/07/85 | 1442 GMT | | | | 340 04 | 2 | 1014.2 MB | 14.4 C | 13.9 C | %8 | | SC | | |
| CST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SVA | DYN HT | OXYGEN | OXY | SI03 | P04 | N03 | N02 | CHL-A | PHAEO | PRESS |
| M | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | D.BAR |
| 1 | 0 ISL | 16.25 | 16.25 | 33.288 | 24.375 | 354.3 | .000 | 5.83 | 104.0 | | | | | | | 0 |
| 1 | 1 | 16.25 | 16.25 | 33.288 | 24.375 | 354.4 | .004 | 5.83 | 104.0 | 1.6 | .38 | .3 | .01 | .20 | .12 | 1 |
| 1 | 10 ISL | 16.25 | 16.25 | 33.286 | 24.374 | 354.7 | .035 | 5.84 | 104.1 | | | | | | | 10 |
| 1 | 11 | 16.25 | 16.25 | 33.286 | 24.373 | 354.8 | .039 | 5.84 | 104.2 | 1.6 | .39 | .3 | .01 | .20 | .10 | 11 |
| 1 | 20 ISL | 15.35 | 15.35 | 33.229 | 24.532 | 330.9 | .070 | 6.09 | 106.7 | | | | | | | 20 |
| 1 | 30 ISL | 14.08 | 14.08 | 33.197 | 24.779 | 316.7 | .103 | 6.30 | 107.5 | | | | | | | 30 |
| 1 | 33 | 13.67 | 13.66 | 33.195 | 24.863 | 308.8 | .112 | 6.35 | 107.4 | 2.0 | .43 | .3 | .01 | .19 | .08 | 33 |
| 1 | 43 | 12.77 | 12.77 | 33.264 | 25.095 | 286.9 | .142 | 6.14 | 102.0 | 3.0 | .52 | 1.6 | .11 | .26 | .05 | 43 |
| 1 | 50 ISL | 12.55 | 12.54 | 33.296 | 25.164 | 280.5 | .162 | 5.95 | 98.5 | | | | | | | 50 |
| 1 | 54 | 12.48 | 12.48 | 33.310 | 25.187 | 278.4 | .173 | 5.84 | 96.5 | 4.1 | .62 | 3.7 | .25 | .30 | .15 | 54 |
| 1 | 64 | 12.18 | 12.17 | 33.367 | 25.289 | 268.9 | .200 | 5.47 | 89.8 | 5.7 | .70 | 5.6 | .16 | .32 | .13 | 64 |
| 1 | 75 | 11.77 | 11.71 | 33.404 | 25.404 | 258.2 | .229 | 5.41 | 88.0 | 7.3 | .92 | 9.3 | .05 | .22 | .11 | 75 |
| 1 | 85 | 11.26 | 11.25 | 33.409 | 25.492 | 249.9 | .254 | 5.28 | 85.0 | 9.4 | 1.07 | 11.6 | .03 | .13 | .12 | 85 |
| 1 | 96 | 10.63 | 10.62 | 33.484 | 25.662 | 234.0 | .280 | 4.86 | 77.2 | 14.0 | 1.28 | 15.4 | .02 | .05 | .07 | 96 |
| 1 | 100 ISL | 10.60 | 10.58 | 33.537 | 25.710 | 229.5 | .291 | 4.61 | 73.2 | | | | | | | 101 |
| 1 | 104 | 10.55 | 10.54 | 33.591 | 25.765 | 224.9 | .303 | 4.31 | 68.4 | 16.0 | 1.37 | 16.5 | .02 | .05 | .06 | 106 |
| 1 | 121 | 10.15 | 10.13 | 33.680 | 25.899 | 212.0 | .338 | 3.92 | 61.7 | 19.9 | 1.52 | 19.2 | .01 | .03 | .05 | 122 |
| 1 | 125 ISL | 10.07 | 10.05 | 33.696 | 25.925 | 209.6 | .346 | 3.87 | 60.9 | | | | | | | 126 |
| 1 | 137 | 9.79 | 9.77 | 33.742 | 26.008 | 201.8 | .371 | 3.75 | 58.6 | 22.4 | 1.62 | 20.8 | .01 | .02 | .03 | 138 |
| 1 | 150 ISL | 9.43 | 9.41 | 33.785 | 26.101 | 193.2 | .396 | 3.56 | 55.2 | | | | | | | 151 |
| 1 | 163 | 9.10 | 9.09 | | | | .421 | 3.37 | 51.9 | 28.5 | 1.85 | 24.1 | .01 | .01 | .07 | 164 |
| 1 | 189 | 8.88 | 8.86 | 33.911 | 26.288 | 176.1 | .468 | 3.19 | 48.9 | 31.0 | 1.95 | 25.4 | .01 | .00 | .03 | 180 |
| 1 | 200 ISL | 8.69 | 8.67 | 33.949 | 26.347 | 170.7 | .487 | 3.05 | 46.5 | | | | | | | 201 |
| 1 | 215 | 8.42 | 8.39 | 33.996 | 26.427 | 163.3 | .511 | 2.83 | 42.9 | 36.5 | 2.10 | 27.9 | .01 | | | 216 |
| 1 | 250 ISL | 7.88 | 7.86 | 34.050 | 26.549 | 152.1 | .567 | 2.40 | 36.0 | | | | | | | 252 |
| 1 | 300 ISL | 7.25 | 7.22 | 34.088 | 26.671 | 141.1 | .640 | 1.86 | 27.4 | | | | | | | 302 |
| 1 | 318 | 7.05 | 7.02 | 34.089 | 26.698 | 138.5 | .665 | 1.68 | 24.7 | 55.7 | 2.66 | 34.7 | .01 | | | 320 |
| 1 | 400 ISL | 6.29 | 6.25 | 34.162 | 26.858 | 124.1 | .773 | .91 | 13.1 | | | | | | | 403 |
| 1 | 425 | 6.11 | 6.07 | 34.182 | 26.897 | 120.6 | .804 | .72 | 10.4 | 75.1 | 3.10 | 39.7 | .01 | | | 428 |
| 1 | 500 ISL | 5.76 | 5.72 | 34.234 | 26.983 | 113.2 | .891 | .47 | 6.7 | | | | | | | 504 |
| 1 | 527 | 5.66 | 5.62 | 34.251 | 27.009 | 111.0 | .922 | .43 | 6.1 | 86.4 | 3.28 | 41.8 | .01 | | | 531 |
| 1 | 600 ISL | 5.35 | 5.30 | 34.304 | 27.089 | 104.0 | 1.000 | .40 | 5.7 | | | | | | | 605 |
| 1 | 700 ISL | 4.94 | 4.88 | 34.369 | 27.188 | 95.2 | 1.100 | .36 | 5.1 | | | | | | | 706 |
| 1 | 780 | 4.61 | 4.55 | 34.419 | 27.266 | 88.3 | 1.180 | .33 | 4.6 | 109.5 | 3.46 | 44.6 | .01 | | | 794 |
| 1 | 800 ISL | 4.57 | 4.51 | 34.425 | 27.275 | 87.6 | 1.191 | .33 | 4.6 | | | | | | | 807 |
| 1 | 1000 ISL | 3.99 | 3.92 | 34.483 | 27.383 | 78.1 | 1.357 | .52 | 7.1 | | | | | | | 1009 |
| 1 | 1054 | 3.97 | 3.79 | 34.488 | 27.400 | 76.7 | 1.398 | .61 | 8.3 | 125.0 | 3.48 | 44.8 | .01 | | | 1063 |

RV NEW HORIZON

FRONTS LEG II

STATION 10 11

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD | AMT | TYPE | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-------|------|-------|-------|-------|
| 32 40.0 N | 120 20.5 W | 17/07/85 | 1006 GWT | | | | 310 03 | 2 | 1013.9 MB | 15.0 C | 13.9 C | | R/R | ST | | |
| CST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SWA | DYN M1 | OXYGEN | OXY | S103 | P04 | N03 | N02 | CHL-A | PHAEO | PRESS |
| M | | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | D.BAR |
| 1 | 0 ISL | 16.53 | 16.53 | 33.286 | 24.310 | 360.6 | .000 | 5.80 | 104.0 | | | | | | | 0 |
| 1 | 2 | 16.53 | 16.53 | 33.286 | 24.310 | 360.6 | .007 | 5.80 | 104.0 | 1.7 | .44 | .2 | .01 | .18 | .05 | 2 |
| 1 | 10 ISL | 16.52 | 16.52 | 33.284 | 24.311 | 360.7 | .036 | 5.85 | 104.9 | | | | | | | 10 |
| 1 | 12 | 16.52 | 16.52 | 33.284 | 24.311 | 360.8 | .043 | 5.87 | 105.2 | 1.6 | .45 | .2 | .01 | .18 | .05 | 12 |
| 1 | 20 ISL | 15.70 | 15.70 | 33.263 | 24.481 | 344.8 | .072 | 6.03 | 106.4 | | | | | | | 20 |
| 1 | 30 ISL | 14.37 | 14.37 | 33.249 | 24.750 | 319.4 | .105 | 6.22 | 106.8 | | | | | | | 30 |
| 1 | 33 | 13.92 | 13.92 | 33.234 | 24.840 | 310.9 | .114 | 6.27 | 106.7 | 2.1 | .46 | .2 | .00 | .28 | .04 | 33 |
| 1 | 43 | 12.85 | 12.84 | 33.215 | 25.042 | 291.9 | .144 | 6.30 | 104.8 | 2.9 | .58 | 1.0 | .06 | .28 | .07 | 43 |
| 1 | 50 ISL | 12.72 | 12.72 | 33.255 | 25.097 | 286.9 | .165 | 6.20 | 102.9 | | | | | | | 50 |
| 1 | 54 | 12.66 | 12.65 | 33.263 | 25.116 | 285.1 | .175 | 6.13 | 101.4 | 3.2 | .65 | 2.3 | .17 | .32 | .08 | 54 |
| 1 | 65 | 12.19 | 12.18 | 33.303 | 25.238 | 275.8 | .206 | 5.94 | 97.5 | 4.6 | .79 | 4.8 | .34 | .33 | .10 | 65 |
| 1 | 75 | 11.84 | 11.83 | 33.412 | 25.388 | 259.7 | .232 | 5.37 | 87.6 | 7.7 | .97 | 8.9 | .13 | .24 | .12 | 75 |
| 1 | 85 | 10.99 | 10.98 | 33.431 | 25.558 | 241.7 | .258 | 5.09 | 81.5 | 11.6 | 1.22 | 12.9 | .03 | .08 | .08 | 85 |
| 1 | 96 | 10.43 | 10.42 | 33.521 | 25.726 | 227.9 | .283 | 4.68 | 74.1 | 15.9 | 1.63 | 16.4 | .02 | .04 | .06 | 96 |
| 1 | 100 ISL | 10.21 | 10.20 | 33.567 | 25.800 | 222.9 | .293 | 4.45 | 70.2 | | | | | | | 101 |
| 1 | 106 | 9.97 | 9.96 | 33.624 | 25.885 | 212.9 | .305 | 4.19 | 65.5 | 21.0 | 1.64 | 20.4 | .01 | .02 | .06 | 106 |
| 1 | 121 | 9.73 | 9.72 | 33.751 | 26.024 | 200.0 | .338 | 3.71 | 57.9 | 23.3 | 1.66 | 21.0 | .01 | .02 | .06 | 122 |
| 1 | 125 ISL | 9.60 | 9.58 | 33.780 | 26.069 | 195.8 | .345 | 3.61 | 56.1 | | | | | | | 126 |
| 1 | 134 | 9.15 | 9.13 | 33.862 | 26.207 | 182.8 | .367 | 3.32 | 51.2 | 28.7 | 1.90 | 24.2 | .01 | .01 | .02 | 137 |
| 1 | 150 ISL | 8.94 | 8.82 | 33.927 | 26.306 | 171.6 | .391 | 3.11 | 47.6 | | | | | | | 151 |
| 1 | 163 | 8.65 | 8.63 | 33.967 | 26.367 | 164.0 | .413 | 2.97 | 45.3 | 34.6 | 2.11 | 26.8 | .01 | .00 | .02 | 164 |
| 1 | 187 | 8.35 | 8.33 | 34.019 | 26.454 | 160.2 | .454 | 2.72 | 41.2 | 38.6 | 2.22 | 28.2 | .00 | .00 | .03 | 189 |
| 1 | 207 ISL | 8.19 | 8.17 | 34.017 | 26.476 | 158.0 | .473 | 2.72 | 41.1 | | | | | | | 201 |
| 1 | 214 | 8.01 | 7.99 | 34.014 | 26.501 | 156.0 | .495 | 2.73 | 41.0 | 40.8 | 2.29 | 29.1 | .01 | | | 215 |
| 1 | 250 ISL | 7.60 | 7.57 | 34.039 | 26.582 | 141.8 | .550 | 2.40 | 35.7 | | | | | | | 252 |
| 1 | 300 ISL | 7.10 | 7.07 | 34.091 | 26.693 | 138.8 | .622 | 1.77 | 26.1 | | | | | | | 302 |
| 1 | 316 | 6.96 | 6.93 | 34.111 | 26.728 | 135.6 | .644 | 1.53 | 22.5 | 59.0 | 2.77 | 35.3 | .00 | | | 318 |
| 1 | 400 ISL | 6.29 | 6.25 | 34.178 | 26.872 | 122.8 | .753 | .83 | 11.9 | | | | | | | 403 |
| 1 | 422 | 6.13 | 6.09 | 34.193 | 26.904 | 120.0 | .780 | .69 | 9.9 | 75.5 | 3.17 | 39.8 | .00 | | | 425 |
| 1 | 500 ISL | 5.66 | 5.62 | 34.235 | 26.996 | 111.9 | .870 | .44 | 6.3 | | | | | | | 504 |
| 1 | 523 | 5.54 | 5.50 | 34.246 | 27.019 | 109.8 | .896 | .40 | 5.7 | 87.7 | 3.36 | 41.9 | .00 | | | 527 |
| 1 | 600 ISL | 5.27 | 5.17 | 34.299 | 27.100 | 102.8 | .977 | .37 | 5.2 | | | | | | | 605 |
| 1 | 700 ISL | 4.67 | 4.61 | 34.365 | 27.193 | 94.6 | 1.076 | .35 | 4.6 | | | | | | | 704 |
| 1 | 784 | 4.46 | 4.57 | 34.417 | 27.261 | 88.8 | 1.153 | .29 | 4.0 | 108.8 | 3.54 | 44.1 | .00 | | | 790 |
| 1 | 800 ISL | 4.59 | 4.52 | 34.424 | 27.273 | 87.8 | 1.167 | .30 | 4.1 | | | | | | | 807 |
| 1 | 1000 ISL | 4.00 | 3.92 | 34.484 | 27.383 | 78.1 | 1.333 | .48 | 6.6 | | | | | | | 1009 |
| 1 | 1053 | 3.46 | 3.78 | 34.490 | 27.403 | 76.5 | 1.374 | .57 | 7.8 | 124.7 | 3.53 | 45.9 | .00 | | | 1062 |

RV NEW HORIZON

FRONTS LEG II

STATION 11 2

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD | AMT | TYPE | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-------|------|-------|-------|-------|
| 32 21.6 N | 120 32.0 W | 17/07/85 | 1413 GWT | | | | 310 03 | 2 | 1015.2 MB | 15.6 C | 13.9 C | | R/R | SC | | |
| CST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SWA | DYN HT | OXYGEN | OXY | S103 | P04 | N03 | N02 | CHL-A | PHAEO | PRESS |
| M | | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | D.BAR |
| 1 | 0 ISL | 16.96 | 16.96 | 33.262 | 24.192 | 371.8 | .000 | 5.70 | 103.1 | | | | | | | 0 |
| 1 | 1 | 16.96 | 16.96 | 33.262 | 24.192 | 371.8 | .004 | 5.70 | 103.1 | 1.6 | .37 | .3 | .00 | .13 | .01 | 1 |
| 1 | 10 ISL | 16.96 | 16.95 | 33.260 | 24.191 | 372.1 | .037 | 5.71 | 103.2 | | | | | | | 10 |
| 1 | 11 | 16.96 | 16.95 | 33.260 | 24.191 | 372.2 | .041 | 5.71 | 103.2 | 1.6 | .38 | .3 | .00 | .12 | .02 | 11 |
| 1 | 20 ISL | 16.15 | 16.12 | 33.318 | 24.427 | 350.0 | .073 | 5.87 | 104.4 | | | | | | | 20 |
| 1 | 30 ISL | 14.92 | 14.91 | 33.365 | 24.732 | 321.2 | .107 | 6.03 | 104.8 | | | | | | | 30 |
| 1 | 32 | 14.65 | 14.65 | 33.373 | 24.794 | 315.3 | .113 | 6.06 | 104.7 | 2.5 | .37 | .3 | .00 | .14 | .03 | 32 |
| 1 | 42 | 13.70 | 13.70 | 33.296 | 24.934 | 302.2 | .144 | 6.03 | 102.2 | 2.6 | .39 | .3 | .00 | .20 | .13 | 42 |
| 1 | 50 ISL | 13.33 | 13.37 | 33.348 | 25.040 | 292.5 | .168 | 6.02 | 101.4 | | | | | | | 50 |
| 1 | 52 | 13.33 | 13.32 | 33.361 | 25.059 | 290.5 | .173 | 6.02 | 101.2 | 3.2 | .54 | 2.1 | .11 | .26 | .09 | 52 |
| 1 | 63 | 12.77 | 12.77 | 33.342 | 25.155 | 281.7 | .205 | 5.97 | 99.2 | 3.7 | .63 | 3.5 | .21 | .29 | .09 | 63 |
| 1 | 73 | 12.01 | 12.00 | 33.305 | 25.274 | 270.5 | .232 | 5.71 | 93.4 | 4.7 | .71 | 5.2 | .15 | .27 | .12 | 73 |
| 1 | 75 ISL | 11.91 | 11.91 | 33.312 | 25.297 | 268.4 | .238 | 5.64 | 92.1 | | | | | | | 76 |
| 1 | 83 | 11.74 | 11.73 | 33.357 | 25.365 | 262.2 | .258 | 5.43 | 88.3 | 6.6 | .83 | 7.4 | .09 | .21 | .11 | 83 |
| 1 | 93 | 11.65 | 11.64 | 33.428 | 25.436 | 255.6 | .284 | 5.18 | 84.1 | 8.3 | .95 | 9.2 | .06 | .18 | .11 | 93 |
| 1 | 100 ISL | 11.46 | 11.65 | 33.449 | 25.450 | 254.5 | .303 | 5.12 | 83.2 | | | | | | | 101 |
| 1 | 104 | 11.67 | 11.66 | 33.461 | 25.460 | 251.6 | .312 | 5.09 | 82.7 | 8.8 | .99 | 9.7 | .05 | .16 | .10 | 104 |
| 1 | 114 | 11.07 | 11.05 | 33.578 | 25.660 | 234.8 | .349 | 4.54 | 72.9 | 13.3 | 1.23 | 14.2 | .03 | .10 | .12 | 119 |
| 1 | 125 ISL | 10.69 | 10.68 | 33.635 | 25.770 | 224.5 | .364 | 4.32 | 68.7 | | | | | | | 126 |
| 1 | 133 | 10.22 | 10.21 | 33.703 | 25.905 | 211.7 | .382 | 4.05 | 63.9 | 18.9 | 1.46 | 17.8 | .02 | .05 | .08 | 134 |
| 1 | 150 ISL | 9.60 | 9.58 | 33.794 | 26.080 | 195.3 | .416 | 3.59 | 55.9 | | | | | | | 151 |
| 1 | 159 | 9.37 | 9.35 | 33.828 | 26.115 | 189.2 | .433 | 3.39 | 52.5 | 26.6 | 1.81 | 23.2 | .02 | .01 | .03 | 160 |
| 1 | 185 | 8.99 | 8.97 | 33.905 | 26.266 | 178.1 | .481 | 3.10 | 47.6 | 30.7 | 2.00 | 25.5 | .01 | .00 | .02 | 186 |
| 1 | 200 ISL | 8.71 | 8.69 | 33.948 | 26.344 | 171.0 | .507 | 3.05 | 46.6 | | | | | | | 201 |
| 1 | 210 | 8.52 | 8.50 | 33.974 | 26.393 | 166.4 | .524 | 3.03 | 46.1 | 34.7 | 2.09 | 26.9 | .01 | | | 211 |
| 1 | 250 ISL | 7.87 | 7.88 | 34.018 | 26.517 | 151.2 | .588 | 2.60 | 39.0 | | | | | | | 252 |
| 1 | 300 ISL | 7.30 | 7.27 | 34.090 | 26.665 | 141.7 | .661 | 1.93 | 28.5 | | | | | | | 302 |
| 1 | 312 | 7.19 | 7.15 | 34.097 | 26.687 | 139.7 | .679 | 1.74 | 25.7 | 54.4 | 2.67 | 34.4 | .00 | | | 314 |
| 1 | 400 ISL | 6.60 | 6.56 | 34.205 | 26.852 | 124.9 | .795 | .86 | 12.6 | | | | | | | 403 |
| 1 | 420 | 6.51 | 6.47 | 34.227 | 26.882 | 122.4 | .820 | .71 | 10.3 | 70.7 | 3.14 | 38.6 | .01 | | | 423 |
| 1 | 500 ISL | 6.14 | 6.10 | 34.277 | 26.969 | 114.9 | .914 | .44 | 6.4 | | | | | | | 504 |
| 1 | 522 | 6.05 | 6.00 | 34.287 | 26.989 | 112.2 | .940 | .41 | 5.9 | 80.8 | 3.34 | 40.6 | .00 | | | 526 |
| 1 | 600 ISL | 5.67 | 5.62 | 34.323 | 27.065 | 106.6 | 1.025 | .37 | 5.3 | | | | | | | 605 |
| 1 | 700 ISL | 5.20 | 5.14 | 34.365 | 27.155 | 98.7 | 1.128 | .32 | 4.5 | | | | | | | 706 |
| 1 | 785 | 4.82 | 4.76 | 34.395 | 27.223 | 91.6 | 1.209 | .28 | 3.9 | 104.2 | 3.53 | 44.0 | .00 | | | 791 |
| 1 | 800 ISL | 4.76 | 4.70 | 34.401 | 27.235 | 91.6 | 1.223 | .28 | 4.0 | | | | | | | 807 |
| 1 | 1000 ISL | 4.07 | 4.00 | 34.471 | 27.366 | 79.9 | 1.395 | .46 | 6.4 | | | | | | | 1009 |
| 1 | 1053 | 3.43 | 3.85 | 34.488 | 27.395 | 77.4 | 1.437 | .55 | 7.5 | | 3.56 | 44.8 | .00 | | | 1062 |

RV NEW HORIZON

FRONTS LEG II

STATION 16 2

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD | AMT | TYPE | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-------|------|-------|-------|-------|
| 31 21.1 N | 121 03.8 W | 18/07/85 | 0742 GMT | | | | 320 D3 | 2 | 1015.6 MB | 16.7 C | 15.0 C | R/R | SC | | | |
| CST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SVA | DYN HT | OXYGEN | OXY | S103 | P04 | N03 | N02 | CHL-A | PHAEO | PRESS |
| M | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | D.BAR |
| 1 | 0 ISL | 18.99 | 18.99 | 33.603 | 23.958 | 394.5 | .000 | 5.47 | 103.1 | | | | | | | 0 |
| | 2 | 18.99 | 18.99 | 33.603 | 23.958 | 394.1 | .008 | 5.47 | 103.1 | 2.4 | .32 | .8 | .00 | .08 | .01 | 2 |
| 1 | 10 ISL | 18.98 | 18.98 | 33.622 | 23.974 | 392.9 | .039 | 5.47 | 103.1 | | | | | | | 10 |
| | 12 | 18.98 | 18.98 | 33.627 | 23.978 | 392.6 | .047 | 5.47 | 103.1 | 2.4 | .31 | .8 | .00 | .08 | .01 | 12 |
| 1 | 20 ISL | 17.95 | 17.95 | 33.526 | 24.157 | 375.8 | .078 | 5.67 | 104.7 | | | | | | | 20 |
| | 30 ISL | 16.42 | 16.41 | 33.402 | 24.425 | 350.5 | .114 | 5.93 | 106.2 | | | | | | | 30 |
| 1 | 33 | 15.92 | 15.92 | 33.368 | 24.511 | 342.4 | .124 | 6.01 | 106.6 | 2.4 | .34 | .8 | .00 | .10 | .01 | 33 |
| | 43 | 15.08 | 15.08 | 33.350 | 24.684 | 326.1 | .158 | 6.06 | 105.6 | 2.3 | .34 | .8 | .00 | .12 | .03 | 43 |
| 1 | 50 ISL | 14.84 | 14.84 | 33.342 | 24.730 | 322.0 | .181 | 6.05 | 104.9 | | | | | | | 50 |
| | 54 | 14.75 | 14.74 | 33.338 | 24.748 | 320.4 | .193 | 6.04 | 104.6 | 2.3 | .35 | .8 | .00 | .14 | .03 | 54 |
| 1 | 64 | 14.22 | 14.21 | 33.322 | 24.847 | 311.2 | .224 | 6.05 | 103.6 | 2.3 | .37 | .8 | .00 | .20 | .04 | 64 |
| | 75 | 13.71 | 13.70 | 33.299 | 24.935 | 303.1 | .258 | 6.04 | 102.3 | 2.5 | .39 | .8 | .00 | .28 | .13 | 75 |
| 1 | 85 | 13.30 | 13.29 | 33.308 | 25.026 | 294.6 | .288 | 5.88 | 98.8 | 2.9 | .46 | 1.1 | .10 | .26 | .14 | 85 |
| | 95 | 12.77 | 12.75 | 33.358 | 25.170 | 281.1 | .316 | 5.53 | 91.9 | 4.7 | .61 | 4.1 | .19 | .21 | .14 | 95 |
| 1 | 100 ISL | 12.61 | 12.59 | 33.378 | 25.217 | 276.7 | .331 | 5.43 | 90.0 | | | | | | | 101 |
| | 106 | 12.46 | 12.44 | 33.397 | 25.260 | 272.8 | .347 | 5.36 | 88.5 | 5.6 | .71 | 5.9 | .11 | .19 | .13 | 106 |
| 1 | 120 | 11.83 | 11.81 | 33.450 | 25.422 | 257.7 | .386 | 5.06 | 82.5 | 8.1 | .88 | 9.0 | .04 | .13 | .13 | 121 |
| | 125 ISL | 11.65 | 11.63 | 33.473 | 25.472 | 252.9 | .398 | 4.96 | 80.6 | | | | | | | 126 |
| 1 | 136 | 11.21 | 11.20 | 33.534 | 25.599 | 241.0 | .426 | 4.71 | 75.8 | 11.3 | 1.06 | 12.2 | .02 | .09 | .09 | 137 |
| | 150 ISL | 10.64 | 10.62 | 33.595 | 25.749 | 227.0 | .458 | 4.41 | 70.2 | | | | | | | 151 |
| 1 | 162 | 10.13 | 10.11 | 33.651 | 25.881 | 214.6 | .485 | 4.14 | 65.1 | 18.3 | 1.39 | 17.9 | .01 | .02 | .05 | 163 |
| | 186 | 9.18 | 9.16 | 33.797 | 26.151 | 169.2 | .537 | 3.51 | 54.1 | 26.3 | 1.74 | 23.3 | .01 | .00 | .03 | 189 |
| 1 | 200 ISL | 8.91 | 8.89 | 33.869 | 26.250 | 179.9 | .559 | 3.33 | 51.0 | | | | | | | 201 |
| | 213 | 8.68 | 8.66 | 33.942 | 26.344 | 171.2 | .582 | 3.17 | 48.4 | 32.0 | 1.91 | 25.9 | .01 | | | 214 |
| 1 | 250 ISL | 8.13 | 8.11 | 34.038 | 26.503 | 156.6 | .642 | 2.74 | 41.3 | | | | | | | 252 |
| | 300 ISL | 7.52 | 7.49 | 34.051 | 26.603 | 145.4 | .718 | 2.21 | 32.9 | | | | | | | 302 |
| 1 | 317 | 7.35 | 7.31 | 34.073 | 26.645 | 143.8 | .743 | 2.05 | 30.4 | 50.3 | 2.40 | 32.7 | .01 | | | 319 |
| | 400 ISL | 6.30 | 6.26 | 34.112 | 26.818 | 127.9 | .855 | 1.20 | 17.4 | | | | | | | 403 |
| 1 | 423 | 6.04 | 6.00 | 34.121 | 26.859 | 124.2 | .885 | 1.00 | 14.4 | 71.0 | 2.87 | 39.3 | .01 | | | 426 |
| | 500 ISL | 5.56 | 5.52 | 34.166 | 26.977 | 113.5 | .976 | .59 | 8.3 | | | | | | | 504 |
| 1 | 527 | 5.45 | 5.40 | 34.224 | 27.013 | 110.3 | 1.006 | .49 | 6.9 | 85.3 | 3.14 | 42.0 | .01 | | | 530 |
| | 600 ISL | 5.14 | 5.10 | 34.288 | 27.100 | 102.6 | 1.084 | .44 | 6.2 | | | | | | | 605 |
| 1 | 700 ISL | 4.79 | 4.74 | 34.362 | 27.200 | 93.9 | 1.182 | .38 | 5.3 | | | | | | | 706 |
| | 787 | 4.55 | 4.44 | 34.413 | 27.268 | 88.0 | 1.261 | .32 | 4.6 | 106.7 | 3.30 | 44.4 | .00 | | | 793 |
| 1 | 800 ISL | 4.50 | 4.44 | 34.419 | 27.278 | 87.1 | 1.273 | .32 | 4.5 | | | | | | | 807 |
| | 1000 ISL | 3.88 | 3.81 | 34.487 | 27.398 | 76.5 | 1.436 | .55 | 7.5 | | | | | | | 1009 |
| 1 | 1053 | 3.73 | 3.65 | 34.494 | 27.420 | 74.6 | 1.476 | .66 | 9.0 | 123.8 | 3.30 | 44.8 | .00 | | | 1062 |

RV NEW HORIZON

FRONTS LEG II

STATION 17 2

| LATITUDE | | LONGITUDE | | DAY/MO/YR | | MESSENGER | | BOTTOM | | WIND | | SPEED | | WAVES | | WEATHER | | BAROMETER | | DRY | | WET | | CLOUD | | AMT | | TYPE | |
|-----------|----------|------------|----------|-----------|--------|-----------|--------|--------|-------|-------|------|-------|------|--------|-------|---------|--|-----------|--|--------|--|--------|--|-------|--|-----|--|------|--|
| 31 08.2 N | | 121 10.2 W | | 18/07/85 | | 1105 GMT | | | | | | | | 320 D2 | | 2 | | 1015.6 MB | | 16.7 C | | 15.0 C | | #/8 | | #/5 | | SC | |
| CAST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SVA | DYN HT | OXYGEN | OXY | S103 | P04 | N03 | N02 | CHL-A | PHAEO | PRESS | | | | | | | | | | | | | |
| | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | D.BAR | | | | | | | | | | | | | |
| 1 | 0 ISL | 19.01 | 19.01 | 33.610 | 23.957 | 394.4 | .000 | 5.44 | 102.5 | | | | | | | 0 | | | | | | | | | | | | | |
| 1 | 1 | 19.01 | 19.01 | 33.610 | 23.957 | 394.2 | .004 | 5.44 | 102.5 | 2.6 | .43 | .4 | .00 | .08 | .01 | 1 | | | | | | | | | | | | | |
| 1 | 10 ISL | 18.91 | 18.91 | 33.605 | 23.979 | 392.4 | .039 | 5.45 | 102.5 | | | | | | | 10 | | | | | | | | | | | | | |
| 1 | 11 | 18.90 | 18.90 | 33.604 | 23.981 | 392.2 | .043 | 5.45 | 102.5 | 2.6 | .33 | .4 | .00 | .08 | .01 | 11 | | | | | | | | | | | | | |
| 1 | 20 ISL | 18.13 | 18.13 | 33.511 | 24.102 | 381.1 | .078 | 5.62 | 104.1 | | | | | | | 20 | | | | | | | | | | | | | |
| 1 | 30 ISL | 17.01 | 17.00 | 33.405 | 24.291 | 363.3 | .115 | 5.84 | 105.8 | | | | | | | 30 | | | | | | | | | | | | | |
| 1 | 33 | 16.63 | 16.63 | 33.376 | 24.356 | 357.2 | .126 | 5.91 | 106.3 | 2.6 | .35 | .4 | .00 | .08 | .01 | 33 | | | | | | | | | | | | | |
| 1 | 42 | 15.71 | 15.71 | 33.353 | 24.548 | 339.1 | .157 | 6.03 | 106.4 | 2.5 | .34 | .4 | .00 | .09 | .02 | 42 | | | | | | | | | | | | | |
| 1 | 50 ISL | 15.23 | 15.23 | 33.337 | 24.642 | 330.4 | .184 | 6.06 | 105.9 | | | | | | | 50 | | | | | | | | | | | | | |
| 1 | 53 | 15.10 | 15.10 | 33.331 | 24.665 | 328.2 | .193 | 6.07 | 105.8 | 2.5 | .34 | .4 | .00 | .11 | .02 | 53 | | | | | | | | | | | | | |
| 1 | 63 | 14.56 | 14.55 | 33.311 | 24.768 | 314.7 | .226 | 6.05 | 104.3 | 2.6 | .35 | .3 | .00 | .13 | .04 | 63 | | | | | | | | | | | | | |
| 1 | 73 | 14.06 | 14.05 | 33.293 | 24.858 | 310.4 | .257 | 5.99 | 102.2 | 2.7 | .36 | .3 | .00 | .16 | .06 | 73 | | | | | | | | | | | | | |
| 1 | 75 ISL | 13.96 | 13.95 | 33.288 | 24.875 | 309.9 | .264 | 5.98 | 101.9 | | | | | | | 76 | | | | | | | | | | | | | |
| 1 | 84 | 13.59 | 13.58 | 33.281 | 24.947 | 302.2 | .290 | 5.96 | 100.7 | 2.9 | .37 | .3 | .00 | .23 | .15 | 84 | | | | | | | | | | | | | |
| 1 | 94 | 13.08 | 13.07 | 33.326 | 25.083 | 289.4 | .320 | 5.70 | 95.3 | 3.9 | .48 | 1.9 | .15 | .23 | .16 | 94 | | | | | | | | | | | | | |
| 1 | 100 ISL | 12.70 | 12.78 | 33.356 | 25.165 | 281.8 | .338 | 5.52 | 91.8 | | | | | | | 101 | | | | | | | | | | | | | |
| 1 | 104 | 12.41 | 12.60 | 33.374 | 25.212 | 277.3 | .348 | 5.41 | 89.6 | 5.4 | .63 | 4.8 | .10 | .20 | .16 | 104 | | | | | | | | | | | | | |
| 1 | 119 | 11.61 | 11.59 | 33.479 | 25.484 | 251.7 | .390 | 4.85 | 78.7 | 9.4 | .91 | 10.0 | .04 | .12 | .12 | 120 | | | | | | | | | | | | | |
| 1 | 125 ISL | 11.20 | 11.28 | 33.510 | 25.567 | 243.9 | .404 | 4.72 | 76.1 | | | | | | | 126 | | | | | | | | | | | | | |
| 1 | 135 | 10.76 | 10.74 | 33.568 | 25.707 | 230.6 | .429 | 4.51 | 71.9 | 13.3 | 1.13 | 14.0 | .02 | .06 | .07 | 136 | | | | | | | | | | | | | |
| 1 | 150 ISL | 10.24 | 10.22 | 33.656 | 25.866 | 215.8 | .461 | 4.13 | 65.2 | | | | | | | 151 | | | | | | | | | | | | | |
| 1 | 160 | 9.93 | 9.92 | 33.713 | 25.961 | 204.8 | .483 | 3.88 | 60.8 | 20.3 | 1.47 | 19.4 | .01 | .02 | .16 | 161 | | | | | | | | | | | | | |
| 1 | 186 | 9.03 | 9.01 | 33.823 | 26.196 | 184.8 | .553 | 3.46 | 53.2 | 27.3 | 1.74 | 23.9 | .01 | .00 | .02 | 187 | | | | | | | | | | | | | |
| 1 | 200 ISL | 8.80 | 8.78 | 33.880 | 26.277 | 177.4 | .559 | 3.31 | 50.6 | | | | | | | 201 | | | | | | | | | | | | | |
| 1 | 212 | 8.67 | 8.65 | 33.925 | 26.332 | 172.3 | .579 | 3.10 | 48.7 | 31.8 | 1.87 | 26.0 | .01 | | | 213 | | | | | | | | | | | | | |
| 1 | 250 ISL | 8.17 | 8.14 | 34.004 | 26.471 | 159.6 | .643 | 2.79 | 42.1 | | | | | | | 252 | | | | | | | | | | | | | |
| 1 | 300 ISL | 7.57 | 7.54 | 34.062 | 26.604 | 147.5 | .719 | 2.26 | 33.7 | | | | | | | 302 | | | | | | | | | | | | | |
| 1 | 315 | 7.41 | 7.38 | 34.069 | 26.633 | 144.9 | .742 | 2.10 | 31.1 | 49.1 | 2.34 | 32.5 | .01 | | | 317 | | | | | | | | | | | | | |
| 1 | 400 ISL | 6.65 | 6.61 | 34.164 | 26.813 | 128.7 | .858 | 1.11 | 16.2 | | | | | | | 403 | | | | | | | | | | | | | |
| 1 | 423 | 6.45 | 6.41 | 34.183 | 26.854 | 124.9 | .887 | .88 | 12.8 | 67.9 | 2.85 | 38.3 | .00 | | | 426 | | | | | | | | | | | | | |
| 1 | 500 ISL | 5.66 | 5.61 | 34.217 | 26.982 | 113.1 | .979 | .57 | 8.1 | | | | | | | 504 | | | | | | | | | | | | | |
| 1 | 527 | 5.40 | 5.35 | 34.227 | 27.021 | 109.5 | 1.008 | .52 | 7.4 | 85.0 | 3.09 | 42.1 | .00 | | | 530 | | | | | | | | | | | | | |
| 1 | 600 ISL | 5.02 | 4.97 | 34.280 | 27.107 | 101.7 | 1.086 | .46 | 6.5 | | | | | | | 605 | | | | | | | | | | | | | |
| 1 | 700 ISL | 4.68 | 4.62 | 34.351 | 27.204 | 91.3 | 1.181 | .38 | 5.3 | | | | | | | 706 | | | | | | | | | | | | | |
| 1 | 790 | 4.46 | 4.46 | 34.413 | 27.270 | 87.8 | 1.265 | .31 | 4.3 | 107.0 | 3.26 | 44.5 | .00 | | | 796 | | | | | | | | | | | | | |
| 1 | 800 ISL | 4.50 | 4.43 | 34.418 | 27.277 | 87.1 | 1.273 | .31 | 4.3 | | | | | | | 807 | | | | | | | | | | | | | |
| 1 | 1000 ISL | 3.87 | 3.79 | 34.489 | 27.401 | 76.2 | 1.437 | .54 | 7.3 | | | | | | | 1009 | | | | | | | | | | | | | |
| 1 | 1054 | 3.70 | 3.63 | 34.497 | 27.424 | 74.1 | 1.478 | .65 | 8.8 | 123.7 | 3.23 | 44.9 | .00 | | | 1063 | | | | | | | | | | | | | |

RV NEW HORIZON

FRONTS LEG II

STATION 18 1

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WFT | CLOUD | AMT | TYPE | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-------|------|-------|-------|-------|
| 30 49.7 N | 121 19.3 W | 18/07/85 | 1424 GMT | | | | 320 02 | 2 | 1015.9 MB | 16.7 C | 15.0 C | 8/8 | | SC | | |
| CST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SWA | DYN HT | OXYGEN | OXY | SI03 | P04 | N03 | N02 | CHL-A | PHAE0 | PRESS |
| M | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | DBAR |
| 1 | 0 ISL | 19.02 | 19.02 | 33.594 | 23.943 | 395.6 | .000 | 5.44 | 102.5 | 2.6 | .29 | .4 | .00 | .09 | .01 | 0 |
| 1 | 1 | 19.02 | 19.02 | 33.594 | 23.943 | 395.5 | .004 | 5.44 | 102.5 | | | | | | | 1 |
| 1 | 10 ISL | 18.99 | 18.99 | 33.601 | 23.956 | 394.6 | .040 | 5.45 | 102.7 | | | | | | | 10 |
| 1 | 11 | 18.99 | 18.99 | 33.602 | 23.958 | 394.5 | .043 | 5.45 | 102.7 | 2.6 | .29 | .3 | .00 | .09 | .01 | 11 |
| 1 | 20 ISL | 18.13 | 18.12 | 33.508 | 24.100 | 391.2 | .078 | 5.65 | 104.6 | | | | | | | 20 |
| 1 | 30 ISL | 16.90 | 16.90 | 33.400 | 24.312 | 381.5 | .115 | 5.90 | 106.6 | | | | | | | 30 |
| 1 | 32 | 16.64 | 16.63 | 33.380 | 24.358 | 357.0 | .122 | 5.95 | 107.0 | 2.6 | .31 | .3 | .00 | .10 | .01 | 32 |
| 1 | 42 | 15.72 | 15.71 | 33.353 | 24.567 | 330.2 | .157 | 6.07 | 107.2 | 2.7 | .30 | .3 | .00 | .11 | .01 | 42 |
| 1 | 50 ISL | 15.15 | 15.12 | 33.316 | 24.663 | 329.4 | .184 | 6.08 | 106.0 | | | | | | | 50 |
| 1 | 52 | 15.02 | 15.02 | 33.332 | 24.683 | 326.5 | .190 | 6.08 | 105.8 | 2.8 | .30 | .3 | .00 | .13 | .02 | 52 |
| 1 | 64 | 14.56 | 14.55 | 33.312 | 24.767 | 319.8 | .229 | 6.07 | 104.7 | 2.8 | .31 | .3 | .00 | .15 | .03 | 64 |
| 1 | 73 | 14.27 | 14.21 | 33.305 | 24.834 | 312.7 | .257 | 6.05 | 103.6 | 2.7 | .30 | .3 | .00 | .20 | .06 | 73 |
| 1 | 75 ISL | 14.16 | 14.15 | 33.301 | 24.844 | 311.8 | .264 | 6.05 | 103.4 | | | | | | | 76 |
| 1 | 83 | 13.94 | 13.93 | 33.297 | 24.880 | 308.6 | .288 | 6.02 | 102.5 | 2.7 | .33 | .3 | .00 | .23 | .13 | 83 |
| 1 | 93 | 13.44 | 13.47 | 33.276 | 24.964 | 300.8 | .318 | 5.92 | 99.8 | 3.2 | .37 | .3 | .01 | .28 | .17 | 93 |
| 1 | 100 ISL | 13.15 | 13.17 | 33.302 | 25.043 | 293.4 | .340 | 5.74 | 96.2 | | | | | | | 100 |
| 1 | 104 | 13.04 | 13.03 | 33.320 | 25.087 | 289.5 | .351 | 5.64 | 94.2 | 4.3 | .48 | 2.3 | .13 | .27 | .19 | 104 |
| 1 | 119 | 12.34 | 12.32 | 33.409 | 25.208 | 270.0 | .392 | 5.22 | 86.0 | 6.7 | .68 | 6.4 | .05 | .19 | .16 | 119 |
| 1 | 125 ISL | 12.02 | 12.01 | 33.461 | 25.393 | 240.5 | .409 | 5.05 | 82.7 | | | | | | | 125 |
| 1 | 133 | 11.42 | 11.60 | 33.529 | 25.522 | 246.4 | .431 | 4.85 | 78.7 | 9.8 | .86 | 10.0 | .02 | .11 | .10 | 133 |
| 1 | 150 ISL | 10.40 | 10.78 | 33.603 | 25.727 | 229.2 | .471 | 4.54 | 72.5 | | | | | | | 150 |
| 1 | 159 | 10.37 | 10.36 | 33.635 | 25.826 | 215.8 | .491 | 4.35 | 68.8 | | | | | .02 | .04 | 160 |
| 1 | 185 | 9.51 | 9.51 | 33.776 | 26.078 | 196.2 | .545 | 3.48 | 54.1 | 25.1 | 1.61 | 22.4 | .01 | .01 | .02 | 186 |
| 1 | 206 ISL | 9.18 | 9.16 | 33.853 | 26.195 | 185.3 | .573 | 3.22 | 49.6 | | | | | | | 201 |
| 1 | 211 | 8.94 | 8.94 | 33.904 | 26.270 | 178.3 | .593 | 3.08 | 47.3 | 31.1 | 1.80 | 25.5 | .01 | | | 212 |
| 1 | 250 ISL | 8.32 | 8.29 | 34.008 | 26.451 | 161.6 | .660 | 2.66 | 40.2 | | | | | | | 252 |
| 1 | 300 ISL | 7.65 | 7.62 | 34.069 | 26.599 | 148.1 | .737 | 2.22 | 33.2 | | | | | | | 302 |
| 1 | 311 | 7.50 | 7.47 | 34.070 | 26.621 | 146.1 | .757 | 2.13 | 31.7 | 48.6 | 2.23 | 32.0 | .01 | | | 315 |
| 1 | 400 ISL | 6.10 | 6.15 | 34.103 | 26.800 | 129.7 | .876 | 1.33 | 19.2 | | | | | | | 403 |
| 1 | 421 | 6.15 | 6.12 | 34.107 | 26.832 | 124.7 | .904 | 1.15 | 16.6 | 69.3 | 2.68 | 38.3 | .01 | | | 424 |
| 1 | 500 ISL | 5.60 | 5.56 | 34.171 | 26.953 | 115.8 | .999 | .69 | 9.8 | | | | | | | 504 |
| 1 | 524 | 5.47 | 5.43 | 34.192 | 26.985 | 112.9 | 1.026 | .59 | 8.4 | 84.5 | 2.97 | 41.4 | .01 | | | 527 |
| 1 | 600 ISL | 5.14 | 5.09 | 34.262 | 27.079 | 104.6 | 1.109 | .52 | 7.3 | | | | | | | 605 |
| 1 | 700 ISL | 4.79 | 4.73 | 34.343 | 27.184 | 95.3 | 1.209 | .42 | 5.9 | | | | | | | 706 |
| 1 | 783 | 4.57 | 4.51 | 34.402 | 27.257 | 89.0 | 1.286 | .34 | 4.7 | 107.5 | 3.13 | 44.0 | .00 | | | 789 |
| 1 | 800 ISL | 4.51 | 4.45 | 34.411 | 27.270 | 87.8 | 1.301 | .34 | 4.8 | | | | | | | 807 |
| 1 | 1000 ISL | 3.57 | 3.79 | 34.482 | 27.396 | 76.7 | 1.465 | .56 | 7.6 | | | | | | | 1009 |
| 1 | 1044 | 3.77 | 3.65 | 34.487 | 27.414 | 75.0 | 1.498 | .65 | 8.8 | 124.2 | 3.17 | 44.7 | .01 | | | 1052 |

RV NEW HORIZON

FRONTS LEG II

STATION 18 9

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WFT | CLOUD AMT | TYPE | | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-----------|------|-------|-------|-------|
| 30 49.7 N | 121 19.9 W | 19/07/85 | 0903 GMT | | 340 | 05 KT | 320 03 | 2 | 1015.9 MB | 17.2 C | 15.6 C | 8/8 | SC | | | |
| CST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SWA | DYN HT | OXYGEN | OXY | SI03 | P04 | N03 | N02 | CHL-A | PHAE0 | PRESS |
| M | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | D.BAR |
| 1 | 0 ISL | 18.93 | 18.93 | 33.490 | 23.886 | 401.8 | .000 | 5.46 | 102.7 | 2.8 | .40 | .1 | .00 | .07 | .01 | 0 |
| 1 | 2 | 18.93 | 18.93 | 33.490 | 23.886 | 401.0 | .008 | 5.46 | 102.7 | | | | | | | 2 |
| 1 | 10 ISL | 18.77 | 18.77 | 33.482 | 23.922 | 397.9 | .040 | 5.48 | 102.8 | | | | | | | 10 |
| 1 | 12 | 18.73 | 18.72 | 33.480 | 23.930 | 397.1 | .048 | 5.49 | 102.8 | 2.8 | .39 | .1 | .00 | .08 | .00 | 12 |
| 1 | 20 ISL | 17.82 | 17.82 | 33.436 | 24.120 | 379.4 | .079 | 5.68 | 104.5 | | | | | | | 20 |
| 1 | 30 ISL | 16.55 | 16.54 | 33.382 | 24.381 | 354.7 | .116 | 5.92 | 106.2 | | | | | | | 30 |
| 1 | 33 | 16.15 | 16.14 | 33.368 | 24.462 | 347.1 | .126 | 5.99 | 106.7 | 2.7 | .40 | .0 | .00 | .09 | .01 | 33 |
| 1 | 43 | 15.41 | 15.41 | 33.330 | 24.596 | 334.5 | .160 | 6.06 | 106.1 | 2.7 | .39 | .0 | .00 | .10 | .01 | 43 |
| 1 | 50 ISL | 15.00 | 14.99 | 33.322 | 24.681 | 328.7 | .183 | 6.06 | 105.4 | | | | | | | 50 |
| 1 | 54 | 14.82 | 14.81 | 33.320 | 24.719 | 323.1 | .196 | 6.06 | 105.0 | 2.4 | .39 | .0 | .00 | .14 | .03 | 54 |
| 1 | 64 | 14.44 | 14.43 | 33.313 | 24.794 | 316.2 | .228 | 6.06 | 104.2 | 2.7 | .40 | .0 | .00 | .17 | .05 | 64 |
| 1 | 74 | 14.09 | 14.07 | 33.300 | 24.860 | 310.3 | .259 | 5.700 | 97.30 | 2.7 | .41 | .1 | .00 | .20 | .08 | 74 |
| 1 | 75 ISL | 14.05 | 14.04 | 33.299 | 24.865 | 308.8 | .263 | 6.03 | | | | | | | | 76 |
| 1 | 85 | 13.77 | 13.76 | 33.292 | 24.917 | 305.1 | .293 | 5.95 | 100.9 | 2.9 | .42 | .1 | .00 | .25 | .15 | 85 |
| 1 | 95 | 13.14 | 13.17 | 33.280 | 25.028 | 294.7 | .322 | 5.76 | 96.5 | 3.5 | .49 | .6 | .10 | .28 | .18 | 95 |
| 1 | 100 ISL | 12.98 | 12.96 | 33.314 | 25.095 | 288.4 | .338 | 5.63 | 93.9 | | | | | | | 101 |
| 1 | 105 | 12.81 | 12.80 | 33.351 | 25.156 | 282.7 | .351 | 5.50 | 91.5 | 4.9 | .56 | 3.2 | .11 | .24 | .16 | 105 |
| 1 | 121 | 11.95 | 11.93 | 33.446 | 25.396 | 260.2 | .394 | 5.00 | 81.7 | 8.4 | .87 | 8.1 | .03 | .14 | .14 | 121 |
| 1 | 125 ISL | 11.77 | 11.75 | 33.473 | 25.450 | 255.1 | .406 | 4.92 | 80.2 | | | | | | | 126 |
| 1 | 135 | 11.36 | 11.34 | 33.535 | 25.574 | 245.4 | .432 | 4.74 | 76.5 | 10.9 | 1.01 | 10.9 | .02 | .09 | .09 | 136 |
| 1 | 150 ISL | 10.52 | 10.50 | 33.636 | 25.802 | 221.9 | .466 | 4.19 | 66.5 | | | | | | | 151 |
| 1 | 161 | 9.98 | 9.88 | 33.715 | 25.969 | 206.1 | .490 | 3.75 | 58.7 | 21.6 | 1.57 | 20.0 | .01 | .01 | .03 | 162 |
| 1 | 187 | 9.24 | 9.26 | 33.833 | 26.164 | 188.0 | .541 | 3.28 | 50.7 | 27.8 | 1.83 | 23.7 | .01 | .00 | .02 | 188 |
| 1 | 200 ISL | 9.01 | 8.99 | 33.891 | 26.252 | 179.8 | .565 | 3.12 | 47.9 | | | | | | | 201 |
| 1 | 213 | 8.76 | 8.74 | 33.944 | 26.333 | 172.3 | .587 | 2.98 | 45.6 | 33.3 | 1.97 | 26.1 | .01 | | | 214 |
| 1 | 250 ISL | 8.15 | 8.12 | 34.016 | 26.483 | 159.4 | .649 | 2.68 | 40.5 | | | | | | | 252 |
| 1 | 300 ISL | 7.45 | 7.42 | 34.036 | 26.601 | 146.2 | .725 | 2.32 | 34.4 | | | | | | | 302 |
| 1 | 316 | 7.25 | 7.22 | 34.051 | 26.643 | 141.9 | .748 | 2.21 | 32.7 | 50.4 | 2.39 | 32.2 | .01 | | | 318 |
| 1 | 400 ISL | 6.29 | 6.25 | 34.105 | 26.813 | 124.3 | .862 | 1.29 | 18.6 | | | | | | | 403 |
| 1 | 424 | 6.07 | 6.03 | 34.120 | 26.854 | 124.6 | .893 | 1.03 | 14.8 | 70.8 | 2.89 | 39.0 | .01 | | | 427 |
| 1 | 500 ISL | 5.63 | 5.59 | 34.201 | 26.972 | 114.0 | .983 | .57 | 8.1 | | | | | | | 504 |
| 1 | 528 | 5.47 | 5.47 | 34.232 | 27.011 | 110.6 | 1.014 | .46 | 6.5 | 84.9 | 3.31 | 41.7 | .00 | | | 531 |
| 1 | 600 ISL | 5.20 | 5.15 | 34.295 | 27.098 | 102.9 | 1.092 | .42 | 5.0 | | | | | | | 605 |
| 1 | 700 ISL | 4.81 | 4.76 | 34.365 | 27.199 | 94.0 | 1.190 | .36 | 5.0 | | | | | | | 706 |
| 1 | 790 | 4.51 | 4.45 | 34.412 | 27.271 | 87.6 | 1.272 | .31 | 4.3 | 107.6 | 3.31 | 44.4 | .00 | | | 797 |
| 1 | 800 ISL | 4.48 | 4.41 | 34.417 | 27.278 | 87.0 | 1.281 | .31 | 4.3 | | | | | | | 807 |
| 1 | 1000 ISL | 3.86 | 3.78 | 34.484 | 27.398 | 76.4 | 1.444 | .51 | 7.0 | | | | | | | 1009 |
| 1 | 1053 | 3.71 | 3.63 | 34.492 | 27.419 | 74.6 | 1.484 | .61 | 8.3 | 124.5 | 3.27 | 44.7 | .00 | | | 1062 |

RV NEW HORIZON

FRONTS LEG II

STATION 19 7

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD | AMT | TYPE | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-------|------|-------|-------|-------|
| 31 08.2 N | 121 10.5 W | 19/07/85 | 1308 GMT | | | | 330 03 | 2 | 1016.9 MB | 17.2 C | 15.6 C | A/R | SC | | | |
| CST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SWA | DYN HT | OXYGEN | OXY PCT | STO3 | PO4 | NO3 | NO2 | CHL-A | PHAEO | PRESS |
| | M | DEG C | DEG C | | THETA | | | ML/L | | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | D.BAR |
| 1 | 0 ISL | 18.85 | 18.85 | 33.541 | 23.945 | 395.3 | .000 | 5.44 | 102.2 | 2.7 | .32 | .1 | .00 | .08 | .01 | 0 |
| | 1 | 18.85 | 18.85 | 33.541 | 23.945 | 395.4 | .004 | 5.44 | 102.2 | | | | | | | 1 |
| 1 | 10 ISL | 18.87 | 18.87 | 33.537 | 23.939 | 396.3 | .040 | 5.45 | 102.4 | | | | | | | 10 |
| 1 | 11 | 18.87 | 18.87 | 33.537 | 23.938 | 396.3 | .043 | 5.45 | 102.4 | 2.6 | .31 | .0 | .00 | .09 | .00 | 11 |
| 1 | 20 ISL | 18.57 | 18.56 | 33.526 | 24.006 | 390.2 | .079 | 5.51 | 103.0 | | | | | | | 20 |
| 1 | 30 ISL | 18.21 | 18.22 | 33.514 | 24.031 | 385.4 | .118 | 5.59 | 103.7 | | | | | | | 30 |
| 1 | 32 | 18.17 | 18.16 | 33.512 | 24.095 | 382.1 | .125 | 5.60 | 103.8 | 2.6 | .30 | .0 | .00 | .10 | .01 | 32 |
| 1 | 42 | 15.75 | 15.75 | 33.352 | 24.538 | 340.1 | .161 | 6.05 | 106.9 | 2.5 | .32 | .0 | .00 | .10 | .01 | 42 |
| 1 | 50 ISL | 15.19 | 15.19 | 33.332 | 24.647 | 330.0 | .188 | 6.05 | 105.7 | | | | | | | 50 |
| 1 | 53 | 15.13 | 15.12 | 33.331 | 24.660 | 329.8 | .197 | 6.05 | 105.5 | 2.5 | .33 | .0 | .00 | .12 | .02 | 53 |
| 1 | 63 | 14.49 | 14.48 | 33.312 | 24.783 | 317.3 | .230 | 6.05 | 104.2 | 2.4 | .34 | .0 | .00 | .15 | .03 | 63 |
| 1 | 73 | 14.05 | 14.04 | 33.291 | 24.858 | 310.3 | .261 | 5.99 | 102.2 | 2.5 | .35 | .0 | .00 | .18 | .04 | 73 |
| 1 | 75 ISL | 13.94 | 13.97 | 33.287 | 24.870 | 309.3 | .268 | 5.98 | 101.9 | | | | | | | 75 |
| 1 | 84 | 13.72 | 13.71 | 33.280 | 24.918 | 304.9 | .294 | 5.93 | 100.5 | 2.6 | .37 | .0 | .00 | .22 | .15 | 84 |
| 1 | 94 | 13.33 | 13.32 | 33.300 | 25.014 | 296.0 | .324 | 5.82 | 97.8 | 3.4 | .42 | .5 | .07 | .26 | .16 | 94 |
| 1 | 100 ISL | 12.97 | 12.96 | 33.341 | 25.116 | 286.4 | .343 | 5.65 | 94.2 | | | | | | | 101 |
| 1 | 104 | 12.76 | 12.75 | 33.367 | 25.178 | 280.6 | .353 | 5.53 | 91.9 | 4.8 | .60 | 3.6 | .19 | .21 | .13 | 104 |
| 1 | 120 | 11.92 | 11.91 | 33.457 | 25.409 | 258.8 | .396 | 5.01 | 81.8 | 7.9 | .84 | 7.9 | .04 | .14 | .12 | 120 |
| 1 | 125 ISL | 11.60 | 11.58 | 33.505 | 25.506 | 249.7 | .410 | 4.86 | 78.8 | | | | | | | 126 |
| 1 | 134 | 11.07 | 11.06 | 33.585 | 25.664 | 234.8 | .433 | 4.62 | 74.2 | 12.4 | 1.08 | 12.1 | .02 | .07 | .07 | 135 |
| 1 | 150 ISL | 10.47 | 10.45 | 33.652 | 25.823 | 219.9 | .468 | 4.27 | 67.7 | | | | | | | 151 |
| 1 | 160 | 10.13 | 10.11 | 33.682 | 25.905 | 212.2 | .490 | 4.06 | 63.9 | 18.8 | 1.40 | 17.3 | .01 | .02 | .04 | 161 |
| 1 | 186 | 9.08 | 9.06 | 33.812 | 26.179 | 186.5 | .542 | 3.50 | 53.8 | 27.1 | 1.76 | 23.0 | .00 | .00 | .06 | 187 |
| 1 | 200 ISL | 8.45 | 8.43 | 33.870 | 26.260 | 178.9 | .567 | 3.32 | 50.8 | | | | | | | 201 |
| 1 | 212 | 8.74 | 8.71 | 33.914 | 26.313 | 174.1 | .588 | 3.19 | 48.7 | 31.8 | 1.91 | 25.2 | .00 | | | 213 |
| 1 | 250 ISL | 8.14 | 8.11 | 34.000 | 26.472 | 159.5 | .652 | 2.72 | 41.0 | | | | | | | 252 |
| 1 | 300 ISL | 7.40 | 7.37 | 34.068 | 26.633 | 144.7 | .728 | 2.13 | 31.5 | | | | | | | 302 |
| 1 | 314 | 7.20 | 7.17 | 34.078 | 26.669 | 141.4 | .748 | 1.96 | 28.9 | 52.3 | 2.48 | 32.8 | .00 | | | 316 |
| 1 | 400 ISL | 6.58 | 6.54 | 34.171 | 26.828 | 127.2 | .863 | 1.05 | 15.7 | | | | | | | 403 |
| 1 | 422 | 6.44 | 6.40 | 34.186 | 26.858 | 124.6 | .892 | .86 | 12.5 | 68.7 | 2.93 | 17.6 | .00 | | | 425 |
| 1 | 500 ISL | 5.64 | 5.60 | 34.202 | 26.972 | 114.0 | .984 | .57 | 8.1 | | | | | | | 504 |
| 1 | 525 | 5.39 | 5.35 | 34.205 | 27.005 | 111.0 | 1.012 | .53 | 7.5 | 86.6 | 3.14 | 41.2 | .00 | | | 528 |
| 1 | 600 ISL | 5.00 | 4.95 | 34.262 | 27.096 | 102.7 | 1.092 | .47 | 6.6 | | | | | | | 605 |
| 1 | 700 ISL | 4.65 | 4.59 | 34.344 | 27.201 | 93.5 | 1.191 | .40 | 5.5 | | | | | | | 706 |
| 1 | 787 | 4.50 | 4.44 | 34.419 | 27.278 | 87.0 | 1.269 | .33 | 4.6 | 109.4 | 3.32 | 43.6 | .00 | | | 793 |
| 1 | 800 ISL | 4.46 | 4.40 | 34.426 | 27.288 | 86.1 | 1.280 | .33 | 4.6 | | | | | | | 807 |
| 1 | 1000 ISL | 3.86 | 3.79 | 34.495 | 27.407 | 75.6 | 1.442 | .54 | 7.4 | | | | | | | 1009 |
| 1 | 1053 | 3.71 | 3.65 | 34.500 | 27.426 | 73.9 | 1.482 | .65 | 8.8 | 124.6 | 3.29 | 43.9 | .00 | | | 1062 |

RV NEW HORIZON

FRONTS LEG II

STATION 20 3

| LATITUDE | | LONGITUDE | | DAY/MO/YR | | MESSENGER | | BOTTOM | | WIND | | SPEED | | WAVES | | WEATHER | | BAROMETER | | DRY | | WET | | CLOUD | | AMT | | TYPE | | | | |
|-----------|---|------------|-----|-----------|---|-----------|------|--------|----------|------|--------|-------|-------|--------|-------|---------|------|-----------|-------|--------|-------|--------|------|-------|------|------|-----|-------|-----|-------|-------|-------|
| 31 22.0 N | | 121 03.5 W | | 19/07/85 | | 1727 GMT | | | | 350 | | 06 KT | | 330 03 | | 2 | | 1018.3 | | 17.8 C | | 15.6 C | | A/R | | SC | | | | | | |
| CST | D | PTH | | TEMP | | POT | TEMP | | SALINITY | | SIGMA | | SVA | DYN | HT | OXYGEN | | OXY | | STO3 | | PO4 | | NO3 | | NO2 | | CHL-A | | PHAEO | | PRESS |
| | | | M | DEG | C | DEG | C | | | | THETA | | | | | ML/L | | PCT | | UM/L | | UM/L | | UM/L | | UM/L | | UG/L | | UG/L | D.BAR | |
| 1 | | 0 | ISL | 18.81 | | 18.81 | | | 33.480 | | 23.909 | | 398.9 | | .000 | | 5.45 | | 102.3 | | 2.4 | | .32 | | .1 | | .00 | | .08 | | .01 | 0 |
| 1 | | 1 | | 18.81 | | 18.81 | | | 33.480 | | 23.909 | | 398.9 | | .004 | | 5.45 | | 102.3 | | | | | | | | | | | | | 1 |
| 1 | | 10 | ISL | 18.78 | | 18.78 | | | 33.480 | | 23.917 | | 399.4 | | .040 | | 5.50 | | 103.1 | | | | | | | | | | | | | 10 |
| 1 | | 11 | | 18.78 | | 18.78 | | | 33.480 | | 23.918 | | 399.3 | | .044 | | 5.51 | | 103.3 | | 2.3 | | .32 | | .1 | | .00 | | .08 | | .01 | 11 |
| 1 | | 20 | ISL | 17.90 | | 17.90 | | | 33.434 | | 24.099 | | 381.3 | | .079 | | 5.70 | | 105.1 | | | | | | | | | | | | | 20 |
| 1 | | 30 | ISL | 16.69 | | 16.68 | | | 33.386 | | 24.351 | | 357.6 | | .116 | | 5.92 | | 106.5 | | | | | | | | | | | | | 30 |
| 1 | | 32 | | 16.43 | | 16.42 | | | 33.378 | | 24.404 | | 352.6 | | .123 | | 5.96 | | 106.7 | | 2.4 | | .32 | | .1 | | .00 | | .10 | | .01 | 32 |
| 1 | | 42 | | 15.61 | | 15.60 | | | 33.359 | | 24.576 | | 336.5 | | .157 | | 6.04 | | 106.4 | | 2.5 | | .31 | | .1 | | .00 | | .10 | | .02 | 42 |
| 1 | | 50 | ISL | 15.13 | | 15.12 | | | 33.344 | | 24.670 | | 327.7 | | .184 | | 6.04 | | 105.4 | | | | | | | | | | | | | 50 |
| 1 | | 53 | | 14.79 | | 14.78 | | | 33.338 | | 24.696 | | 325.3 | | .193 | | 6.04 | | 105.1 | | 2.5 | | .32 | | .1 | | .00 | | .12 | | .02 | 53 |
| 1 | | 63 | | 14.51 | | 14.50 | | | 33.319 | | 24.785 | | 317.1 | | .225 | | 6.03 | | 103.9 | | 2.4 | | .32 | | .1 | | .00 | | .15 | | .04 | 63 |
| 1 | | 74 | | 14.06 | | 14.04 | | | 33.293 | | 24.860 | | 310.3 | | .259 | | 5.98 | | 102.0 | | 2.4 | | .34 | | .1 | | .00 | | .19 | | .06 | 74 |
| 1 | | 75 | ISL | 14.00 | | 13.99 | | | 33.291 | | 24.870 | | 309.3 | | .263 | | 5.97 | | 101.8 | | | | | | | | | | | | | 76 |
| 1 | | 84 | | 13.62 | | 13.61 | | | 33.291 | | 24.947 | | 302.1 | | .290 | | 5.91 | | 99.9 | | 2.6 | | .36 | | .1 | | .00 | | .22 | | .16 | 84 |
| 1 | | 94 | | 13.21 | | 13.19 | | | 33.296 | | 25.035 | | 294.0 | | .320 | | 5.78 | | 96.9 | | 3.5 | | .43 | | .6 | | .08 | | .29 | | .18 | 94 |
| 1 | | 100 | ISL | 12.98 | | 12.97 | | | 33.321 | | 25.099 | | 288.0 | | .338 | | 5.65 | | 94.2 | | | | | | | | | | | | | 101 |
| 1 | | 105 | | 12.81 | | 12.79 | | | 33.343 | | 25.150 | | 287.2 | | .351 | | 5.53 | | 92.0 | | 4.6 | | .55 | | 3.1 | | .13 | | .26 | | .16 | 105 |
| 1 | | 119 | | 12.04 | | 12.03 | | | 33.421 | | 25.358 | | 263.7 | | .392 | | 5.08 | | 83.2 | | 7.5 | | .78 | | 7.4 | | .04 | | .19 | | .13 | 120 |
| 1 | | 125 | ISL | 11.86 | | 11.85 | | | 33.440 | | 25.414 | | 258.6 | | .406 | | 4.98 | | 81.2 | | | | | | | | | | | | | 126 |
| 1 | | 135 | | 11.55 | | 11.53 | | | 33.498 | | 25.510 | | 246.6 | | .433 | | 4.82 | | 78.1 | | 9.7 | | .93 | | 10.0 | | .02 | | .11 | | .11 | 136 |
| 1 | | 150 | ISL | 10.91 | | 10.89 | | | 33.563 | | 25.677 | | 233.9 | | .468 | | 4.55 | | 72.8 | | | | | | | | | | | | | 151 |
| 1 | | 161 | | 10.39 | | 10.37 | | | 33.619 | | 25.812 | | 221.2 | | .494 | | 4.31 | | 68.2 | | 16.2 | | 1.27 | | 15.8 | | .01 | | .03 | | .05 | 162 |
| 1 | | 186 | | 9.47 | | 9.45 | | | 33.777 | | 26.089 | | 195.1 | | .545 | | 3.64 | | 56.5 | | 24.2 | | 1.63 | | 21.6 | | .01 | | .01 | | .02 | 187 |
| 1 | | 200 | ISL | 9.04 | | 9.02 | | | 33.853 | | 26.217 | | 183.1 | | .572 | | 3.41 | | 52.4 | | | | | | | | | | | | | 201 |
| 1 | | 212 | | 8.72 | | 8.70 | | | 33.911 | | 26.313 | | 174.1 | | .593 | | 3.25 | | 49.6 | | 31.1 | | 1.85 | | 25.3 | | .01 | | | | | 213 |
| 1 | | 250 | ISL | 8.05 | | 8.02 | | | 34.019 | | 26.500 | | 154.7 | | .656 | | 2.70 | | 40.6 | | | | | | | | | | | | | 252 |
| 1 | | 300 | ISL | 7.44 | | 7.41 | | | 34.086 | | 26.641 | | 143.9 | | .731 | | 2.08 | | 30.8 | | | | | | | | | | | | | 302 |
| 1 | | 315 | | 7.32 | | 7.29 | | | 34.088 | | 26.661 | | 142.7 | | .753 | | 1.91 | | 28.3 | | 51.6 | | 2.45 | | 33.1 | | .01 | | | | | 317 |
| 1 | | 400 | ISL | 6.23 | | 6.19 | | | 34.123 | | 26.836 | | 126.1 | | .867 | | 1.34 | | 19.3 | | | | | | | | | | | | | 403 |
| 1 | | 422 | | 5.98 | | 5.94 | | | 34.128 | | 26.871 | | 122.9 | | .895 | | 1.22 | | 17.5 | | 72.4 | | 2.91 | | 39.4 | | .01 | | | | | 425 |
| 1 | | 500 | ISL | 5.47 | | 5.43 | | | 34.198 | | 26.989 | | 112.2 | | .986 | | .64 | | 9.0 | | | | | | | | | | | | | 504 |
| 1 | | 525 | | 5.36 | | 5.31 | | | 34.222 | | 27.022 | | 100.3 | | 1.013 | | .47 | | 6.6 | | 87.2 | | 3.14 | | 42.3 | | .01 | | | | | 528 |
| 1 | | 600 | ISL | 5.07 | | 5.02 | | | 34.287 | | 27.108 | | 101.8 | | 1.093 | | .43 | | 6.0 | | | | | | | | | | | | | 605 |
| 1 | | 700 | ISL | 4.76 | | 4.70 | | | 34.361 | | 27.203 | | 91.5 | | 1.190 | | .37 | | 5.2 | | | | | | | | | | | | | 706 |
| 1 | | 786 | | 4.55 | | 4.49 | | | 34.413 | | 27.267 | | 82.1 | | 1.268 | | .32 | | 4.4 | | 105.8 | | 3.28 | | 44.4 | | .00 | | | | | 792 |
| 1 | | 800 | ISL | 4.51 | | 4.45 | | | 34.420 | | 27.277 | | 82.2 | | 1.281 | | .32 | | 4.5 | | | | | | | | | | | | | 807 |
| 1 | | 1000 | ISL | 3.49 | | 3.41 | | | 34.489 | | 27.398 | | 76.5 | | 1.444 | | .53 | | 7.3 | | | | | | | | | | | | | 1009 |
| 1 | | 1051 | | 3.72 | | 3.65 | | | 34.494 | | 27.420 | | 74.5 | | 1.483 | | .63 | | 8.6 | | 124.3 | | 3.27 | | 44.9 | | .00 | | | | | 1060 |

RV NEW HORIZON

FRONTS LEG II

STATION 21 3

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | ROTTOP | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLCUD | AMT | TYPE | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-------|------|-------|-------|-------|
| 31 35.0 N | 120 56.2 W | 19/07/85 | 2138 GMT | | | | 350 02 | 2 | | 18.9 C | 16.1 C | | | SC | | |
| CST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SVA | DYN HT | OXYGEN | ORY | SI03 | P04 | N03 | N02 | CHL-A | PHAE0 | PRESS |
| M | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UP/L | UG/L | UG/L | D.BAR |
| 1 | 0 ISL | 18.16 | 18.16 | 33.357 | 23.975 | 395.1 | .000 | 5.59 | 103.5 | | | | | | | 0 |
| 1 | 2 | 18.16 | 18.16 | 33.357 | 23.975 | 392.5 | .008 | 5.59 | 103.5 | | | | | | | 2 |
| 1 | 10 ISL | 17.66 | 17.66 | 33.327 | 24.075 | 383.3 | .039 | 5.66 | 103.7 | | | | | | | 10 |
| 1 | 12 | 17.56 | 17.56 | 33.323 | 24.096 | 381.3 | .046 | 5.67 | 103.8 | 2.2 | .34 | .0 | .00 | .11 | .01 | 12 |
| 1 | 20 ISL | 17.32 | 17.31 | 33.330 | 24.140 | 375.5 | .077 | 5.72 | 104.1 | | | | | | | 20 |
| 1 | 30 ISL | 17.01 | 17.01 | 33.339 | 24.239 | 362.3 | .114 | 5.77 | 104.6 | | | | | | | 30 |
| 1 | 33 | 16.93 | 16.92 | 33.342 | 24.261 | 366.2 | .125 | 5.79 | 104.7 | 2.3 | .34 | .0 | .00 | .14 | .02 | 33 |
| 1 | 42 | 15.43 | 15.43 | 33.341 | 24.600 | 334.1 | .156 | 6.08 | 106.7 | 2.8 | .35 | .0 | .00 | .15 | .03 | 42 |
| 1 | 50 ISL | 14.91 | 14.90 | 33.358 | 24.728 | 322.2 | .183 | 6.07 | 105.5 | | | | | | | 50 |
| 1 | 54 | 14.71 | 14.70 | 33.362 | 24.753 | 319.9 | .195 | 6.07 | 105.2 | 2.7 | .34 | .0 | .00 | .20 | .05 | 54 |
| 1 | 64 | 14.45 | 14.44 | 33.356 | 24.825 | 313.3 | .226 | 6.02 | 103.6 | 2.8 | .34 | .0 | .00 | .23 | .07 | 64 |
| 1 | 75 | 13.86 | 13.85 | 33.322 | 24.921 | 304.4 | .260 | 6.14 | 104.4 | 2.9 | .39 | .3 | .01 | .31 | .10 | 75 |
| 1 | 85 | 13.58 | 13.57 | 33.462 | 25.088 | 288.7 | .290 | 5.67 | 95.9 | 4.3 | .50 | 1.7 | .11 | .24 | .09 | 85 |
| 1 | 94 | 12.61 | 12.60 | 33.402 | 25.235 | 275.0 | .321 | 5.63 | 93.3 | 5.2 | .64 | 4.6 | .25 | .19 | .08 | 94 |
| 1 | 100 ISL | 12.32 | 12.31 | 33.404 | 25.291 | 269.7 | .333 | 5.53 | 91.1 | | | | | | | 100 |
| 1 | 106 | 12.02 | 12.00 | 33.422 | 25.364 | 262.8 | .347 | 5.36 | 87.7 | 7.1 | .85 | 7.9 | .12 | .14 | .07 | 106 |
| 1 | 121 | 11.31 | 11.29 | 33.558 | 25.600 | 240.6 | .387 | 4.66 | 75.2 | 11.9 | 1.07 | 12.0 | .03 | .09 | .12 | 121 |
| 1 | 125 ISL | 11.16 | 11.14 | 33.568 | 25.635 | 237.3 | .396 | 4.59 | 73.8 | | | | | | | 125 |
| 1 | 136 | 10.68 | 10.66 | 33.584 | 25.738 | 227.9 | .422 | 4.42 | 70.3 | 14.9 | 1.25 | 14.8 | .01 | .05 | .06 | 136 |
| 1 | 150 ISL | 10.11 | 10.10 | 33.645 | 25.878 | 214.5 | .453 | 4.11 | 64.6 | | | | | | | 150 |
| 1 | 162 | 9.66 | 9.64 | 33.710 | 26.005 | 202.7 | .478 | 3.82 | 59.5 | 22.1 | 1.56 | 20.1 | .01 | .01 | .03 | 162 |
| 1 | 188 | 8.06 | 8.04 | 33.855 | 26.216 | 182.9 | .528 | 3.34 | 51.4 | 28.6 | 1.81 | 23.8 | .01 | .00 | .03 | 188 |
| 1 | 200 ISL | 8.74 | 8.72 | 33.907 | 26.300 | 175.2 | .549 | 3.27 | 50.1 | | | | | | | 200 |
| 1 | 213 | 8.51 | 8.48 | 33.955 | 26.381 | 167.6 | .571 | 3.24 | 49.2 | 33.6 | 1.92 | 25.8 | .00 | | | 213 |
| 1 | 250 ISL | 7.85 | 7.83 | 34.026 | 26.534 | 153.5 | .631 | 2.85 | 42.7 | | | | | | | 250 |
| 1 | 300 ISL | 7.16 | 7.13 | 34.048 | 26.651 | 141.5 | .705 | 2.21 | 32.6 | | | | | | | 300 |
| 1 | 315 | 6.98 | 6.96 | 34.064 | 26.688 | 139.5 | .726 | 1.99 | 29.2 | 54.6 | 2.50 | 33.4 | .01 | | | 315 |
| 1 | 400 ISL | 6.14 | 6.11 | 34.115 | 26.840 | 125.7 | .838 | 1.16 | 16.7 | | | | | | | 400 |
| 1 | 421 | 5.98 | 5.94 | 34.127 | 26.870 | 122.9 | .865 | .99 | 14.2 | 72.9 | 2.93 | 39.0 | .00 | | | 421 |
| 1 | 500 ISL | 5.51 | 5.47 | 34.208 | 26.993 | 111.9 | .917 | .59 | 8.4 | | | | | | | 500 |
| 1 | 523 | 5.40 | 5.36 | 34.233 | 27.026 | 109.0 | .982 | .52 | 7.4 | 87.6 | 3.16 | 41.6 | .00 | | | 523 |
| 1 | 600 ISL | 5.07 | 5.02 | 34.301 | 27.119 | 100.7 | 1.063 | .48 | 6.7 | | | | | | | 600 |
| 1 | 700 ISL | 4.71 | 4.65 | 34.374 | 27.219 | 92.0 | 1.160 | .42 | 5.8 | | | | | | | 700 |
| 1 | 782 | 4.46 | 4.40 | 34.420 | 27.283 | 86.4 | 1.233 | .37 | 5.1 | 107.9 | 3.29 | 43.9 | .00 | | | 782 |
| 1 | 800 ISL | 4.40 | 4.34 | 34.428 | 27.296 | 85.2 | 1.248 | .38 | 5.2 | | | | | | | 800 |
| 1 | 1000 ISL | 3.83 | 3.75 | 34.490 | 27.406 | 75.6 | 1.409 | .58 | 7.9 | | | | | | | 1000 |
| 1 | 1055 | 3.49 | 3.61 | 34.494 | 27.424 | 74.1 | 1.451 | .68 | 9.2 | 125.1 | 3.26 | 44.1 | .00 | | | 1055 |

RV NEW HORIZON

FRONTS LEG II

STATION 22 3

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLCUD | AMT | TYPE | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-------|------|-------|-------|-------|
| 31 44.8 N | 120 50.8 W | 20/07/85 | 0116 GMT | | | | 340 02 | 1 | 1016.5 MB | 18.9 C | 16.7 C | | | SC | | |
| CST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SVA | DYN HT | OXYGEN | OXY | SI03 | P04 | N03 | N02 | CHL-A | PHAE0 | PRESS |
| M | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | D.BAR |
| 1 | 0 ISL | 17.52 | 17.52 | 33.274 | 24.067 | 384.4 | .000 | 5.61 | 102.6 | | | | | | | 0 |
| 1 | 1 | 17.52 | 17.52 | 33.274 | 24.067 | 383.7 | .004 | 5.61 | 102.6 | 2.2 | .36 | .1 | .00 | .12 | .01 | 1 |
| 1 | 10 ISL | 17.20 | 17.20 | 33.270 | 24.140 | 377.0 | .038 | 5.70 | 103.6 | | | | | | | 10 |
| 1 | 11 | 17.17 | 17.16 | 33.269 | 24.148 | 376.2 | .042 | 5.71 | 103.7 | 2.2 | .37 | .0 | .00 | .12 | .01 | 11 |
| 1 | 20 ISL | 16.73 | 16.73 | 33.256 | 24.240 | 367.8 | .075 | 5.79 | 104.2 | | | | | | | 20 |
| 1 | 30 ISL | 16.25 | 16.25 | 33.245 | 24.342 | 358.4 | .112 | 5.87 | 104.7 | | | | | | | 30 |
| 1 | 32 | 16.16 | 16.16 | 33.243 | 24.361 | 356.6 | .118 | 5.89 | 104.8 | 2.0 | .38 | .0 | .00 | .14 | .04 | 32 |
| 1 | 42 | 14.01 | 14.01 | 33.246 | 24.832 | 312.0 | .152 | 6.32 | 107.7 | 2.4 | .39 | .0 | .00 | .19 | .09 | 42 |
| 1 | 50 ISL | 13.00 | 12.99 | 33.154 | 24.965 | 290.4 | .177 | 6.35 | 106.0 | | | | | | | 50 |
| 1 | 52 | 12.89 | 12.89 | 33.144 | 24.979 | 288.2 | .182 | 6.36 | 105.8 | 2.9 | .45 | .1 | .01 | .23 | .10 | 52 |
| 1 | 62 | 13.36 | 13.35 | 33.406 | 25.088 | 288.0 | .211 | 5.86 | 98.6 | 4.0 | .51 | 1.2 | .08 | .26 | .14 | 62 |
| 1 | 73 | 13.16 | 13.15 | 33.470 | 25.178 | 279.8 | .242 | 5.44 | 91.2 | 5.4 | .61 | 3.1 | .14 | .33 | .13 | 73 |
| 1 | 75 ISL | 12.99 | 12.98 | 33.462 | 25.206 | 277.2 | .249 | 5.42 | 90.5 | | | | | | | 75 |
| 1 | 83 | 12.35 | 12.34 | 33.432 | 25.307 | 267.7 | .269 | 5.38 | 88.7 | 6.9 | .78 | 6.1 | .17 | .20 | .11 | 83 |
| 1 | 93 | 11.82 | 11.81 | 33.468 | 25.435 | 255.6 | .296 | 5.24 | 85.4 | 8.8 | .96 | 9.4 | .08 | .15 | .08 | 93 |
| 1 | 100 ISL | 11.44 | 11.43 | 33.464 | 25.503 | 240.4 | .314 | 5.09 | 82.2 | | | | | | | 100 |
| 1 | 103 | 11.32 | 11.31 | 33.463 | 25.524 | 247.3 | .321 | 5.03 | 81.1 | 11.0 | 1.09 | 11.5 | .06 | .12 | .07 | 103 |
| 1 | 117 | 10.79 | 10.77 | 33.561 | 25.696 | 231.3 | .356 | 4.80 | 76.6 | 14.2 | 1.32 | 15.7 | .03 | .05 | .05 | 117 |
| 1 | 125 ISL | 10.44 | 10.42 | 33.607 | 25.793 | 222.2 | .373 | 4.51 | 71.3 | | | | | | | 125 |
| 1 | 133 | 10.05 | 10.03 | 33.659 | 25.900 | 212.1 | .392 | 4.13 | 64.9 | 20.4 | 1.57 | 19.5 | .02 | .03 | .05 | 133 |
| 1 | 150 ISL | 9.49 | 9.48 | 33.768 | 26.077 | 195.5 | .425 | 3.49 | 54.2 | | | | | | | 150 |
| 1 | 158 | 9.29 | 9.27 | 33.816 | 26.147 | 188.9 | .441 | 3.24 | 50.1 | 28.3 | 1.85 | 24.0 | .01 | .01 | .04 | 158 |
| 1 | 184 | 8.94 | 8.92 | 33.903 | 26.273 | 177.5 | .489 | 2.97 | 45.6 | 31.7 | 1.97 | 25.8 | .01 | .00 | .03 | 184 |
| 1 | 200 ISL | 8.56 | 8.54 | 33.954 | 26.371 | 168.3 | .516 | 2.91 | 44.2 | | | | | | | 200 |
| 1 | 207 | 8.34 | 8.32 | 33.980 | 26.426 | 161.2 | .531 | 2.88 | 43.6 | 36.7 | 2.07 | 27.4 | .01 | | | 207 |
| 1 | 250 ISL | 7.75 | 7.72 | 34.042 | 26.562 | 150.7 | .595 | 2.55 | 38.2 | | | | | | | 250 |
| 1 | 300 ISL | 7.27 | 7.25 | 34.064 | 26.647 | 142.4 | .669 | 2.05 | 30.3 | | | | | | | 300 |
| 1 | 312 | 7.20 | 7.17 | 34.075 | 26.667 | 141.5 | .686 | 1.91 | 28.2 | 53.4 | 2.52 | 33.3 | .01 | | | 312 |
| 1 | 400 ISL | 6.25 | 6.22 | 34.133 | 26.840 | 125.8 | .803 | 1.03 | 14.9 | | | | | | | 400 |
| 1 | 418 | 6.09 | 6.05 | 34.144 | 26.872 | 122.9 | .826 | .87 | 12.5 | 72.8 | 2.95 | 39.2 | .01 | | | 418 |
| 1 | 500 ISL | 5.65 | 5.64 | 34.234 | 26.993 | 112.2 | .922 | .46 | 6.6 | | | | | | | 500 |
| 1 | 521 | 5.61 | 5.56 | 34.256 | 27.019 | 109.8 | .945 | .40 | 5.7 | 84.8 | 3.19 | 41.4 | .01 | | | 521 |
| 1 | 600 ISL | 5.24 | 5.19 | 34.317 | 27.111 | 101.7 | 1.029 | .38 | 5.3 | | | | | | | 600 |
| 1 | 700 ISL | 4.82 | 4.77 | 34.377 | 27.208 | 93.2 | 1.126 | .35 | 4.9 | | | | | | | 700 |
| 1 | 778 | 4.53 | 4.47 | 34.410 | 27.267 | 87.9 | 1.197 | .33 | 4.6 | 109.8 | 3.32 | 44.1 | .00 | | | 778 |
| 1 | 800 ISL | 4.45 | 4.39 | 34.420 | 27.283 | 86.5 | 1.216 | .34 | 4.7 | | | | | | | 800 |
| 1 | 1000 ISL | 3.90 | 3.83 | 34.483 | 27.393 | 77.0 | 1.380 | .53 | 7.3 | | | | | | | 1000 |
| 1 | 1043 | 3.82 | 3.74 | 34.490 | 27.407 | 75.8 | 1.413 | .60 | 8.2 | 123.9 | 3.31 | 44.5 | .00 | | | 1043 |

RV NEW HORIZON

FRONTS LEG II

STATION 23 3

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD | AMT | TYPE | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-------|------|-------|-------|-------|
| 31 54.7 N | 120 46.0 W | 20/07/85 | 0448 GMT | | 330 | 11 KT | 340 02 | 2 | 1017.3 MB | 16.1 C | 15.0 C | A/R | | SC | | |
| CST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SVA | DYN HT | OXYGEN | OXY | SI03 | P04 | N03 | N02 | CHL-A | PHAEO | PRESS |
| M | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | D.BAR |
| 1 | 0 ISL | 17.28 | 17.28 | 33.285 | 24.132 | 377.6 | .000 | 5.72 | 104.1 | | | | | | | 0 |
| | 1 | 17.28 | 17.28 | 33.285 | 24.132 | 377.5 | .004 | 5.72 | 104.1 | 1.7 | .38 | .1 | .00 | .13 | .02 | 1 |
| | 10 ISL | 17.20 | 17.20 | 33.278 | 24.146 | 376.5 | .038 | 5.84 | 106.1 | | | | | | | 10 |
| 1 | 11 | 17.20 | 17.19 | 33.277 | 24.147 | 376.3 | .041 | 5.85 | 106.3 | 1.6 | .39 | .0 | .01 | .13 | .07 | 11 |
| | 20 ISL | 16.23 | 16.23 | 33.272 | 24.368 | 356.2 | .074 | 5.98 | 106.6 | | | | | | | 20 |
| | 30 ISL | 14.90 | 14.89 | 33.266 | 24.660 | 328.3 | .109 | 6.13 | 106.4 | | | | | | | 30 |
| 1 | 32 | 14.61 | 14.61 | 33.265 | 24.720 | 327.4 | .115 | 6.16 | 106.3 | 2.0 | .39 | .0 | .01 | .12 | .05 | 32 |
| 1 | 42 | 13.65 | 13.65 | 33.267 | 24.922 | 307.4 | .146 | 6.32 | 106.9 | 2.1 | .42 | .0 | .02 | .27 | .10 | 42 |
| | 50 ISL | 13.22 | 13.22 | 33.292 | 25.028 | 293.5 | .170 | 6.16 | 103.4 | | | | | | | 50 |
| 1 | 52 | 13.15 | 13.14 | 33.298 | 25.047 | 291.7 | .176 | 6.11 | 102.3 | 2.9 | .47 | .3 | .06 | .31 | .08 | 52 |
| 1 | 63 | 12.65 | 12.64 | 33.313 | 25.157 | 281.4 | .207 | 5.87 | 97.3 | 3.6 | .57 | 1.8 | .17 | .29 | .09 | 63 |
| 1 | 73 | 12.11 | 12.10 | 33.323 | 25.268 | 271.1 | .234 | 5.76 | 94.4 | 4.9 | .79 | 5.7 | .32 | .34 | .13 | 73 |
| | 75 ISL | 12.02 | 12.01 | 33.326 | 25.287 | 269.3 | .241 | 5.73 | 93.8 | | | | | | | 75 |
| 1 | 83 | 11.78 | 11.77 | 33.345 | 25.347 | 263.8 | .261 | 5.61 | 91.3 | 6.4 | .91 | 7.9 | .15 | .28 | .09 | 83 |
| 1 | 93 | 11.50 | 11.49 | 33.399 | 25.441 | 255.1 | .287 | 5.33 | 86.3 | 8.7 | 1.02 | 9.9 | .10 | .21 | .07 | 93 |
| | 100 ISL | 11.29 | 11.26 | 33.472 | 25.539 | 246.0 | .305 | 4.99 | 80.4 | | | | | | | 101 |
| 1 | 104 | 11.16 | 11.15 | 33.508 | 25.587 | 241.4 | .314 | 4.83 | 77.6 | 11.8 | 1.16 | 12.6 | .07 | .13 | .10 | 104 |
| 1 | 118 | 10.64 | 10.63 | 33.603 | 25.754 | 225.8 | .349 | 4.45 | 70.8 | 16.6 | 1.40 | 16.8 | .06 | .08 | .07 | 119 |
| 1 | 125 ISL | 10.37 | 10.30 | 33.672 | 25.864 | 215.5 | .363 | 4.04 | 63.8 | | | | | | | 126 |
| 1 | 133 | 9.91 | 9.90 | 33.762 | 26.003 | 202.3 | .381 | 3.49 | 54.7 | 24.9 | 1.71 | 21.6 | .04 | .06 | .06 | 134 |
| 1 | 150 ISL | 9.43 | 9.42 | 33.863 | 26.161 | 187.6 | .413 | 3.02 | 46.9 | | | | | | | 151 |
| 1 | 159 | 9.25 | 9.23 | 33.898 | 26.219 | 182.1 | .430 | 2.91 | 45.0 | 31.3 | 1.95 | 25.1 | .04 | .01 | .04 | 160 |
| 1 | 184 | 8.68 | 8.67 | 33.990 | 26.380 | 167.2 | .474 | 2.63 | 40.1 | 37.0 | 2.12 | 27.5 | .02 | .00 | .03 | 185 |
| | 200 ISL | 8.47 | 8.45 | 34.023 | 26.440 | 161.8 | .500 | 2.62 | 39.8 | | | | | | | 201 |
| 1 | 217 | 8.36 | 8.34 | 34.037 | 26.468 | 159.3 | .516 | 2.61 | 39.6 | 39.9 | 2.17 | 28.3 | .02 | | | 211 |
| | 250 ISL | 7.84 | 7.81 | 34.064 | 26.567 | 150.4 | .578 | 2.38 | 35.7 | | | | | | | 252 |
| 1 | 300 ISL | 7.23 | 7.20 | 34.071 | 26.659 | 141.8 | .651 | 1.96 | 28.9 | | | | | | | 313 |
| 1 | 311 | 7.10 | 7.07 | 34.075 | 26.680 | 140.2 | .667 | 1.84 | 27.1 | 56.2 | 2.54 | 33.7 | .02 | | | 315 |
| 1 | 400 ISL | 6.27 | 6.24 | 34.132 | 26.837 | 124.1 | .785 | 1.01 | 14.6 | | | | | | | 403 |
| 1 | 417 | 6.14 | 6.11 | 34.146 | 26.865 | 123.6 | .807 | .86 | 12.4 | 74.9 | 2.97 | 39.1 | .02 | | | 420 |
| 1 | 500 ISL | 5.66 | 5.62 | 34.236 | 26.997 | 111.8 | .904 | .44 | 6.3 | | | | | | | 504 |
| 1 | 519 | 5.58 | 5.53 | 34.257 | 27.023 | 109.4 | .924 | .38 | 5.4 | 87.6 | 3.21 | 41.5 | .02 | | | 522 |
| | 600 ISL | 5.22 | 5.17 | 34.317 | 27.115 | 101.4 | 1.010 | .35 | 5.0 | | | | | | | 605 |
| 1 | 700 ISL | 4.84 | 4.79 | 34.374 | 27.203 | 93.6 | 1.108 | .32 | 4.5 | | | | | | | 706 |
| 1 | 778 | 4.60 | 4.54 | 34.404 | 27.235 | 89.2 | 1.179 | .30 | 4.2 | 108.6 | 3.34 | 43.9 | .01 | | | 784 |
| 1 | 800 ISL | 4.57 | 4.46 | 34.413 | 27.270 | 87.9 | 1.198 | .31 | 4.3 | | | | | | | 807 |
| | 1000 ISL | 3.96 | 3.89 | 34.478 | 27.382 | 79.2 | 1.364 | .50 | 6.8 | | | | | | | 1009 |
| 1 | 1046 | 3.86 | 3.78 | 34.486 | 27.400 | 76.6 | 1.400 | .57 | 7.8 | 122.6 | 3.32 | 44.4 | .01 | | | 1055 |

RV NEW HORIZON

FRONTS LEG II

STATION 24 2

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD | AMT | TYPE | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-------|------|-------|-------|-------|
| 32 09.3 N | 120 38.3 W | 20/07/85 | 0835 GMT | | 340 | 08 KT | 340 03 | 1 | 1017.6 MB | 15.6 C | 15.0 C | A/R | | SC | | |
| CST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SVA | DYN HT | OXYGEN | OXY | SI03 | P04 | N03 | N02 | CHL-A | PHAEO | PRESS |
| M | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | D.BAR |
| 1 | 0 ISL | 17.20 | 17.20 | 33.263 | 24.135 | 377.2 | .000 | 5.70 | 103.6 | | | | | | | 0 |
| 1 | 2 | 17.20 | 17.20 | 33.263 | 24.135 | 377.2 | .008 | 5.70 | 103.6 | 2.1 | .36 | .1 | .00 | .10 | .02 | 2 |
| 1 | 17 ISL | 17.19 | 17.18 | 33.257 | 24.136 | 377.4 | .038 | 5.71 | 103.7 | | | | | | | 10 |
| 1 | 12 | 17.17 | 17.17 | 33.256 | 24.137 | 377.4 | .045 | 5.71 | 103.7 | 2.0 | .37 | .1 | .00 | .10 | .02 | 12 |
| 1 | 20 ISL | 16.34 | 16.34 | 33.303 | 24.366 | 355.8 | .075 | 5.87 | 104.9 | | | | | | | 20 |
| 1 | 30 ISL | 15.12 | 15.12 | 33.356 | 24.680 | 326.1 | .109 | 6.06 | 105.8 | | | | | | | 30 |
| 1 | 33 | 14.73 | 14.73 | 33.371 | 24.776 | 317.0 | .118 | 6.12 | 105.9 | 2.7 | .35 | .1 | .00 | .13 | .03 | 33 |
| 1 | 43 | 14.06 | 14.05 | 33.317 | 24.877 | 307.7 | .149 | 6.12 | 104.5 | 2.8 | .37 | .1 | .00 | .15 | .06 | 43 |
| 1 | 50 ISL | 13.45 | 13.44 | 33.295 | 24.985 | 297.6 | .171 | 6.10 | 102.4 | | | | | | | 50 |
| 1 | 53 | 13.20 | 13.19 | 33.291 | 25.031 | 293.2 | .179 | 6.09 | 102.1 | 3.0 | .39 | .2 | .01 | .37 | .13 | 53 |
| 1 | 63 | 12.41 | 12.40 | | | | .207 | 5.92 | 97.6 | 4.2 | .64 | 3.3 | .29 | .37 | .15 | 63 |
| 1 | 74 | 12.23 | 12.22 | 33.333 | 25.253 | 272.6 | .237 | 5.68 | 93.3 | 5.3 | .74 | 5.3 | .32 | .30 | .13 | 74 |
| 1 | 75 ISL | 12.19 | 12.18 | 33.335 | 25.263 | 271.6 | .241 | 5.66 | 93.0 | | | | | | | 76 |
| 1 | 84 | 11.87 | 11.86 | 33.369 | 25.350 | 263.6 | .244 | 5.53 | 90.2 | 6.6 | .89 | 6.2 | .10 | .24 | .10 | 84 |
| 1 | 94 | 11.59 | 11.57 | 33.442 | 25.459 | 253.4 | .290 | 5.15 | 83.5 | 9.3 | 1.12 | 10.1 | .08 | .19 | .09 | 94 |
| 1 | 100 ISL | 11.37 | 11.36 | 33.477 | 25.525 | 247.2 | .306 | 4.91 | 79.3 | | | | | | | 101 |
| 1 | 104 | 11.25 | 11.24 | 33.495 | 25.561 | 241.9 | .315 | 4.79 | 77.2 | 11.5 | 1.11 | 12.2 | .07 | .14 | .07 | 104 |
| 1 | 118 | 10.74 | 10.73 | 33.579 | 25.718 | 229.2 | .350 | 4.49 | 71.6 | 15.0 | 1.30 | 15.5 | .03 | .08 | .06 | 119 |
| 1 | 125 ISL | 10.51 | 10.50 | 33.604 | 25.777 | 223.7 | .365 | 4.45 | 70.5 | | | | | | | 126 |
| 1 | 134 | 10.20 | 10.18 | 33.642 | 25.861 | 215.9 | .385 | 4.33 | 68.2 | 19.2 | 1.52 | 19.2 | .01 | .04 | .05 | 135 |
| 1 | 150 ISL | 9.75 | 9.73 | 33.769 | 26.037 | 199.5 | .418 | 3.54 | 55.3 | | | | | | | 151 |
| 1 | 159 | 9.52 | 9.50 | 33.845 | 26.134 | 190.3 | .436 | 3.05 | 47.4 | 28.1 | 1.85 | 23.9 | .02 | .01 | .05 | 160 |
| 1 | 185 | 9.00 | 8.99 | 33.944 | 26.295 | 175.4 | .483 | 2.77 | 42.6 | 33.3 | 2.00 | 26.2 | .01 | .01 | .04 | 186 |
| 1 | 200 ISL | 8.65 | 8.63 | 33.988 | 26.384 | 167.1 | .509 | 2.68 | 40.8 | | | | | | | 201 |
| 1 | 210 | 8.43 | 8.40 | 34.012 | 26.437 | 162.1 | .525 | 2.62 | 39.8 | 37.3 | 2.13 | 28.0 | .03 | | | 211 |
| 1 | 250 ISL | 7.96 | 7.93 | 34.074 | 26.557 | 151.4 | .588 | 2.25 | 33.8 | | | | | | | 252 |
| 1 | 300 ISL | 7.62 | 7.59 | 34.118 | 26.641 | 144.1 | .662 | 1.72 | 25.7 | | | | | | | 302 |
| 1 | 310 | 7.58 | 7.55 | 34.121 | 26.649 | 143.5 | .676 | 1.61 | 24.0 | 48.9 | 2.52 | 32.4 | .02 | | | 312 |
| 1 | 400 ISL | 6.67 | 6.63 | 34.209 | 26.845 | 125.7 | .797 | .80 | 11.7 | | | | | | | 403 |
| 1 | 416 | 6.52 | 6.48 | 34.224 | 26.878 | 122.7 | .817 | .68 | 9.9 | 69.6 | 2.97 | 37.9 | .01 | | | 419 |
| 1 | 500 ISL | 6.06 | 6.02 | 34.296 | 26.994 | 112.5 | .916 | .39 | 5.6 | | | | | | | 504 |
| 1 | 517 | 5.99 | 5.95 | 34.308 | 27.013 | 110.9 | .934 | .36 | 5.2 | 80.7 | 3.16 | 40.1 | .00 | | | 520 |
| 1 | 600 ISL | 5.59 | 5.54 | 34.352 | 27.098 | 103.4 | 1.024 | .33 | 4.8 | | | | | | | 605 |
| 1 | 700 ISL | 5.14 | 5.08 | 34.391 | 27.183 | 96.1 | 1.123 | .30 | 4.3 | | | | | | | 706 |
| 1 | 774 | 4.84 | 4.78 | 34.410 | 27.233 | 91.7 | 1.193 | .28 | 3.9 | 102.0 | 3.29 | 42.9 | .00 | | | 780 |
| 1 | 800 ISL | 4.74 | 4.67 | 34.419 | 27.252 | 90.1 | 1.216 | .29 | 4.0 | | | | | | | 807 |
| 1 | 1000 ISL | 4.04 | 3.96 | 34.470 | 27.368 | 79.7 | 1.386 | .48 | 6.5 | | | | | | | 1009 |
| 1 | 1041 | 3.92 | 3.84 | 34.477 | 27.387 | 78.0 | 1.419 | .54 | 7.4 | 120.9 | 3.27 | 44.1 | .00 | | | 1050 |

RV NEW HORIZON

FRONTS LEG II

STATION 25 2

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSAGE | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD | AMT | TYPE | | |
|-----------|------------|-----------|----------|----------|--------|-------|--------|---------|-----------|--------|--------|-------|------|-------|-------|-------|
| 32 21.2 N | 120 32.1 W | 20/07/85 | 1202 GMT | | 320 | 09 KT | 340 03 | 7 | 1017.6 MB | 15.3 C | 14.7 C | R/P | | SC | | |
| CST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SVA | DYN HT | OXYGEN | OXY | SIO3 | PO4 | NO3 | NO2 | CHL-A | PHAEO | PRESS |
| M | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | D.BAR |
| 1 | 0 ISL | 16.70 | 16.70 | 33.356 | 24.325 | 359.2 | .000 | 5.82 | 104.8 | 2.0 | .37 | .2 | .00 | .19 | .05 | 0 |
| 1 | 1 | 16.70 | 16.70 | 33.356 | 24.325 | 359.1 | .004 | 5.82 | 104.8 | | | | | | | 1 |
| 1 | 10 ISL | 16.70 | 16.69 | 33.362 | 24.330 | 358.9 | .036 | 5.84 | 105.1 | | | | | | | 10 |
| 1 | 11 | 16.70 | 16.69 | 33.363 | 24.331 | 358.9 | .039 | 5.84 | 105.1 | 2.0 | .37 | .2 | .00 | .22 | .05 | 11 |
| 1 | 20 ISL | 16.31 | 16.31 | 33.325 | 24.309 | 351.6 | .072 | 5.93 | 105.9 | | | | | | | 20 |
| 1 | 30 ISL | 15.37 | 15.37 | 33.244 | 24.539 | 339.6 | .106 | 6.09 | 106.7 | | | | | | | 30 |
| 1 | 32 | 15.13 | 15.13 | 33.226 | 24.578 | 336.0 | .115 | 6.13 | 106.9 | 2.0 | .36 | .2 | .00 | .28 | .11 | 32 |
| 1 | 42 | 13.45 | 13.44 | 33.131 | 24.858 | 309.5 | .145 | 6.37 | 107.2 | 2.3 | .37 | .2 | .00 | .24 | .06 | 42 |
| 1 | 50 ISL | 13.04 | 13.03 | 33.155 | 24.958 | 300.1 | .170 | 6.30 | 105.1 | | | | | | | 50 |
| 1 | 53 | 13.00 | 13.00 | 33.172 | 24.979 | 299.2 | .178 | 6.27 | 104.6 | 2.4 | .40 | .2 | .01 | .30 | .07 | 53 |
| 1 | 64 | 12.70 | 12.77 | 33.245 | 25.079 | 289.0 | .210 | 6.14 | 102.0 | 1.3 | .46 | .9 | .06 | .33 | .05 | 64 |
| 1 | 74 | 11.74 | 11.73 | 33.132 | 25.189 | 272.5 | .238 | 5.93 | 96.3 | 5.2 | .72 | 4.4 | .24 | .22 | .08 | 74 |
| 1 | 75 ISL | 11.77 | 11.81 | 33.164 | 25.199 | 277.6 | .242 | 5.87 | 95.6 | | | | | | | 75 |
| 1 | 84 | 12.48 | 12.47 | 33.430 | 25.281 | 270.2 | .266 | 5.42 | 89.6 | 5.8 | .71 | 5.3 | .18 | .24 | .10 | 84 |
| 1 | 95 | 11.91 | 11.79 | 33.534 | 25.490 | 250.5 | .294 | 4.80 | 78.3 | 10.0 | .93 | 6.7 | .09 | .14 | .11 | 95 |
| 1 | 100 ISL | 11.53 | 11.52 | 33.557 | 25.559 | 244.1 | .308 | 4.67 | 75.6 | | | | | | | 100 |
| 1 | 105 | 11.31 | 11.30 | 33.571 | 25.609 | 239.4 | .318 | 4.59 | 74.1 | 12.0 | 1.07 | 11.9 | .06 | .11 | .08 | 105 |
| 1 | 119 | 10.60 | 10.59 | 33.654 | 25.800 | 221.4 | .353 | 4.22 | 67.1 | 16.5 | 1.27 | 15.6 | .03 | .08 | .08 | 120 |
| 1 | 125 ISL | 10.26 | 10.25 | 33.689 | 25.886 | 213.3 | .365 | 4.04 | 63.8 | | | | | | | 125 |
| 1 | 135 | 9.67 | 9.65 | 33.785 | 26.039 | 199.9 | .386 | 3.71 | 57.8 | 22.9 | 1.58 | 20.3 | .01 | .02 | .04 | 135 |
| 1 | 150 ISL | 9.24 | 9.23 | 33.862 | 26.175 | 186.1 | .414 | 3.35 | 51.7 | | | | | | | 151 |
| 1 | 161 | 9.03 | 9.02 | 33.897 | 26.252 | 179.0 | .435 | 3.16 | 48.6 | 29.7 | 1.86 | 24.5 | .01 | .00 | .03 | 162 |
| 1 | 186 | 8.35 | 8.33 | 33.991 | 26.474 | 162.9 | .477 | 3.05 | 46.2 | 35.4 | 1.98 | 26.5 | .00 | .00 | .03 | 187 |
| 1 | 200 ISL | 8.09 | 8.06 | 34.005 | 26.484 | 157.4 | .500 | 2.94 | 44.3 | | | | | | | 201 |
| 1 | 211 | 7.90 | 7.88 | 34.017 | 26.520 | 154.1 | .517 | 2.84 | 42.6 | 40.0 | 2.09 | 28.1 | .00 | | | 212 |
| 1 | 250 ISL | 7.41 | 7.39 | 34.065 | 26.629 | 144.2 | .575 | 2.28 | 33.8 | | | | | | | 252 |
| 1 | 300 ISL | 6.94 | 6.95 | 34.120 | 26.732 | 135.1 | .645 | 1.52 | 22.4 | | | | | | | 302 |
| 1 | 311 | 6.71 | 6.69 | 34.130 | 26.749 | 133.6 | .660 | 1.35 | 19.8 | 59.5 | 2.68 | 35.2 | .01 | | | 313 |
| 1 | 400 ISL | 6.47 | 6.45 | 34.221 | 26.884 | 121.6 | .773 | .65 | 9.5 | | | | | | | 401 |
| 1 | 416 | 6.37 | 6.35 | 34.235 | 26.906 | 119.9 | .795 | .58 | 8.4 | 72.8 | 3.00 | 39.4 | .00 | | | 419 |
| 1 | 500 ISL | 6.01 | 5.97 | 34.284 | 26.992 | 112.7 | .890 | .39 | 5.6 | | | | | | | 504 |
| 1 | 516 | 5.95 | 5.90 | 34.291 | 27.005 | 111.5 | .908 | .38 | 5.5 | 81.4 | 3.14 | 40.0 | .00 | | | 519 |
| 1 | 600 ISL | 5.55 | 5.50 | 34.331 | 27.086 | 104.5 | .999 | .35 | 4.0 | | | | | | | 605 |
| 1 | 700 ISL | 5.10 | 5.05 | 34.373 | 27.174 | 96.9 | 1.100 | .31 | 4.3 | | | | | | | 706 |
| 1 | 770 | 4.90 | 4.74 | 34.400 | 27.230 | 91.9 | 1.166 | .28 | 3.9 | 102.8 | 3.27 | 43.0 | .00 | | | 776 |
| 1 | 900 ISL | 4.68 | 4.62 | 34.411 | 27.251 | 89.9 | 1.193 | .29 | 4.1 | | | | | | | 907 |
| 1 | 1000 ISL | 4.03 | 3.96 | 34.476 | 27.374 | 79.1 | 1.362 | .51 | 6.9 | | | | | | | 1009 |
| 1 | 1036 | 3.94 | 3.86 | 34.486 | 27.392 | 77.5 | 1.390 | .57 | 7.8 | 121.4 | 3.28 | 43.7 | .00 | | | 1045 |

RV NEW HORIZON

FRONTS LEG II

STATION 26 1

| LATITUDE | | LONGITUDE | | DAY/MO/YR | MESSSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD | AMT | TYPE |
|-----------|----------|------------|----------|-----------|------------|--------|--------|--------|--------|---------|-----------|--------|--------|-------|-------|-------|
| 32 40.2 N | | 120 20.0 W | | 20/07/85 | 1525 GMT | | 320 | 10 KT | 340 03 | 2 | 1018.0 MB | 15.0 C | 14.4 C | R/P | SC | |
| CST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SVA | DYN HT | OXYGEN | OXY | SIO3 | PO4 | NO3 | NO2 | CHL-A | PHAEO | PRESS |
| M | | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | D.BAR |
| 1 | 0 ISL | 16.89 | 16.89 | 33.338 | 24.265 | 364.8 | .060 | 5.79 | 104.6 | | | | | | | 0 |
| | 1 | 16.89 | 16.88 | 33.338 | 24.265 | 364.8 | .004 | 5.79 | 104.6 | 2.0 | .37 | .2 | .00 | .13 | .04 | 1 |
| 1 | 10 ISL | 16.88 | 16.88 | 33.336 | 24.268 | 364.9 | .036 | 5.79 | 104.6 | | | | | | | 10 |
| | 11 | 16.88 | 16.87 | 33.336 | 24.268 | 364.9 | .040 | 5.79 | 104.6 | 3.0 | .37 | .1 | .00 | .13 | .04 | 11 |
| 1 | 20 ISL | 16.34 | 16.34 | 33.369 | 24.417 | 351.0 | .072 | 5.99 | 107.2 | | | | | | | 20 |
| | 30 ISL | 15.34 | 15.34 | 33.383 | 24.653 | 349.7 | .106 | 6.21 | 108.8 | | | | | | | 30 |
| 1 | 33 | 14.97 | 14.97 | 33.384 | 24.735 | 321.0 | .115 | 6.27 | 109.1 | 3.4 | .43 | .6 | .03 | .34 | .12 | 33 |
| | 50 | 12.56 | 12.56 | 33.255 | 25.129 | 283.8 | .164 | 6.14 | 101.6 | 4.9 | .60 | 2.5 | .15 | .30 | .08 | 50 |
| 1 | 50 ISL | 12.51 | 12.51 | 33.270 | 25.150 | 281.8 | .167 | 6.11 | 101.0 | | | | | | | 50 |
| | 59 | 12.29 | 12.28 | 33.380 | 25.278 | 269.9 | .191 | 5.89 | 96.9 | 7.2 | .81 | 6.0 | .27 | .23 | .08 | 59 |
| 1 | 71 | 11.64 | 11.63 | 33.374 | 25.396 | 259.9 | .223 | 5.53 | 89.4 | 8.9 | 1.02 | 8.8 | .24 | .20 | .04 | 71 |
| | 75 ISL | 11.49 | 11.48 | 33.392 | 25.438 | 254.9 | .234 | 5.39 | 87.2 | | | | | | | 76 |
| 1 | 86 | 11.12 | 11.11 | 33.448 | 25.548 | 244.6 | .261 | 5.05 | 81.1 | 11.9 | 1.13 | 12.3 | .07 | .09 | .08 | 86 |
| | 96 | 10.63 | 10.61 | 33.489 | 25.667 | 233.5 | .284 | 4.79 | 76.1 | 15.1 | 1.29 | 15.1 | .03 | .06 | .07 | 96 |
| 1 | 100 ISL | 10.54 | 10.53 | 33.505 | 25.696 | 230.9 | .295 | 4.70 | 74.6 | | | | | | | 101 |
| | 107 | 10.41 | 10.40 | 33.516 | 25.742 | 226.6 | .309 | 4.54 | 71.8 | 17.3 | 1.38 | 16.5 | .02 | .03 | .05 | 107 |
| 1 | 116 | 9.92 | 9.91 | 33.629 | 25.897 | 212.0 | .331 | 4.09 | 64.0 | 21.5 | 1.57 | 19.7 | .01 | .02 | .05 | 117 |
| | 125 ISL | 9.67 | 9.66 | 33.714 | 26.005 | 201.9 | .349 | 3.74 | 58.3 | | | | | | | 126 |
| 1 | 126 | 9.64 | 9.62 | 33.727 | 26.021 | 200.4 | .352 | 3.69 | 57.5 | 23.8 | 1.65 | 21.0 | .01 | .01 | .05 | 127 |
| 1 | 147 | 9.16 | 9.14 | 33.862 | 26.205 | 187.2 | .392 | 3.42 | 52.7 | 28.2 | 1.79 | 23.2 | .01 | .01 | .03 | 148 |
| | 150 ISL | 9.10 | 9.08 | 33.875 | 26.225 | 181.4 | .397 | 3.39 | 52.2 | | | | | | | 151 |
| 1 | 174 | 8.62 | 8.60 | 33.950 | 26.358 | 169.0 | .439 | 3.21 | 48.9 | 33.1 | 1.92 | 25.4 | .01 | .00 | .05 | 175 |
| | 200 ISL | 8.36 | 8.34 | 33.979 | 26.421 | 163.5 | .482 | 3.10 | 46.9 | | | | | | | 201 |
| 1 | 204 | 8.33 | 8.31 | 33.981 | 26.428 | 162.9 | .488 | 3.08 | 46.6 | 36.0 | 2.00 | 26.5 | .01 | .00 | .02 | 205 |
| 1 | 230 | 7.91 | 7.89 | 34.011 | 26.515 | 154.9 | .529 | 2.86 | 42.9 | 40.4 | 2.12 | 28.1 | .01 | | | 231 |
| | 250 ISL | 7.63 | 7.61 | 34.032 | 26.572 | 149.8 | .560 | 2.60 | 38.8 | | | | | | | 252 |
| 1 | 300 ISL | 7.03 | 7.00 | 34.074 | 26.690 | 134.1 | .633 | 1.97 | 29.0 | | | | | | | 302 |
| 1 | 347 | 6.58 | 6.55 | 34.103 | 26.774 | 131.5 | .696 | 1.38 | 20.1 | 63.0 | 2.75 | 36.3 | .01 | | | 349 |
| 1 | 400 ISL | 6.12 | 6.08 | 34.132 | 26.857 | 124.0 | .764 | .99 | 14.2 | | | | | | | 403 |
| 1 | 459 | 5.75 | 5.69 | 34.169 | 26.934 | 117.2 | .835 | .69 | 9.8 | 79.2 | 3.06 | 40.1 | .00 | | | 462 |
| 1 | 500 ISL | 5.60 | 5.56 | 34.213 | 26.986 | 112.7 | .882 | .52 | 7.4 | | | | | | | 504 |
| 1 | 564 | 5.46 | 5.41 | 34.284 | 27.059 | 107.4 | .952 | .33 | 4.7 | 88.4 | 3.21 | 41.5 | .00 | | | 568 |
| | 600 ISL | 5.34 | 5.29 | 34.312 | 27.097 | 103.2 | .990 | .34 | 4.8 | | | | | | | 605 |
| 1 | 700 ISL | 4.94 | 4.92 | 34.376 | 27.190 | 91.1 | 1.089 | .36 | 5.0 | | | | | | | 706 |
| | 800 ISL | 4.62 | 4.55 | 34.427 | 27.268 | 81.1 | 1.191 | .38 | 5.1 | | | | | | | 807 |
| 1 | 844 | 4.45 | 4.39 | 34.456 | 27.297 | 78.7 | 1.219 | .39 | 5.4 | 110.2 | 3.30 | 43.6 | .00 | | | 851 |
| | 1000 ISL | 4.00 | 3.92 | 34.485 | 27.384 | 78.1 | 1.347 | .50 | 6.9 | | | | | | | 1009 |
| 1 | 1133 | 3.67 | 3.59 | 34.505 | 27.474 | 73.7 | 1.448 | .64 | 8.7 | 126.8 | 3.25 | 43.7 | .00 | | | 1143 |

RV NEW HORIZON

FRONTS LEG II

STATION 76 9

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD | AMT | TYPE | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-------|------|-------|-------|-------|
| 32 56.7 N | 120 20.4 W | 21/07/85 | 0834 GMT | | 300 | 09 KT | 340 03 | 2 | 1015.9 MB | 14.4 C | 13.9 C | 8/8 | | SC | | |
| CST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SVA | DYN HT | OXYGEN | ORP | SI03 | P04 | N03 | N02 | CHL-A | PHAE0 | PRESS |
| M | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | D.BAR |
| 1 | 0 ISL | 16.89 | 16.89 | 33.346 | 24.271 | 364.3 | .000 | 5.81 | 105.0 | | | | | | | 0 |
| 1 | 1 | 16.89 | 16.89 | 33.346 | 24.271 | 364.3 | .004 | 5.81 | 105.0 | 2.4 | .38 | .1 | .00 | .16 | .03 | 1 |
| 1 | 10 ISL | 16.88 | 16.88 | 33.345 | 24.273 | 364.3 | .036 | 5.81 | 105.0 | | | | | | | 10 |
| 1 | 11 | 16.88 | 16.88 | 33.345 | 24.274 | 364.3 | .040 | 5.81 | 105.0 | 2.5 | .39 | .1 | .00 | .15 | .03 | 11 |
| 1 | 20 ISL | 16.23 | 16.23 | 33.348 | 24.426 | 349.2 | .072 | 6.04 | 107.8 | | | | | | | 20 |
| 1 | 30 ISL | 15.02 | 15.02 | 33.350 | 24.697 | 324.3 | .106 | 6.28 | 109.3 | | | | | | | 30 |
| 1 | 32 | 14.74 | 14.73 | 33.351 | 24.759 | 318.7 | .112 | 6.32 | 109.4 | 2.9 | .46 | .7 | .03 | .40 | .16 | 32 |
| 1 | 47 | 12.19 | 12.18 | 33.242 | 25.191 | 277.8 | .156 | 6.13 | 100.6 | 5.1 | .77 | 3.8 | .20 | .40 | .12 | 47 |
| 1 | 50 ISL | 12.12 | 12.11 | 33.290 | 25.240 | 273.2 | .165 | 6.02 | 98.6 | | | | | | | 50 |
| 1 | 58 | 11.95 | 11.95 | 33.376 | 25.338 | 264.0 | .196 | 5.70 | 93.1 | 7.3 | .91 | 7.7 | .37 | .35 | .11 | 58 |
| 1 | 69 | 11.56 | 11.57 | 33.494 | 25.500 | 248.9 | .214 | 5.25 | 85.2 | 10.8 | 1.13 | 12.0 | .08 | .20 | .10 | 69 |
| 1 | 75 ISL | 11.47 | 11.46 | 33.534 | 25.551 | 244.1 | .230 | 5.10 | 82.6 | | | | | | | 76 |
| 1 | 84 | 11.20 | 11.19 | 33.553 | 25.616 | 238.3 | .250 | 4.93 | 79.3 | 13.8 | 1.28 | 14.5 | .03 | .10 | .07 | 84 |
| 1 | 94 | 10.41 | 10.40 | 33.524 | 25.731 | 227.3 | .274 | 4.63 | 73.2 | 17.0 | 1.43 | 16.8 | .03 | .05 | .05 | 94 |
| 1 | 100 ISL | 10.23 | 10.21 | 33.550 | 25.784 | 222.4 | .288 | 4.52 | 71.2 | | | | | | | 101 |
| 1 | 105 | 10.14 | 10.13 | 33.580 | 25.822 | 217.9 | .298 | 4.42 | 69.5 | 19.6 | 1.55 | 18.7 | .02 | .03 | .05 | 105 |
| 1 | 114 | 9.75 | 9.74 | 33.651 | 25.943 | 207.5 | .319 | 3.96 | 61.8 | 23.3 | 1.72 | 21.3 | .01 | .02 | .05 | 115 |
| 1 | 124 | 9.46 | 9.44 | 33.741 | 26.079 | 190.6 | .359 | 3.68 | 57.3 | 24.1 | 1.70 | 21.2 | .02 | .01 | .04 | 125 |
| 1 | 125 ISL | 9.45 | 9.43 | 33.745 | 26.073 | 190.2 | .341 | 3.67 | 57.1 | | | | | | | 126 |
| 1 | 145 | 9.25 | 9.23 | 33.841 | 26.174 | 186.1 | .380 | 3.40 | 52.5 | 27.9 | 1.84 | 23.3 | .01 | .01 | .04 | 146 |
| 1 | 150 ISL | 9.17 | 9.16 | 33.856 | 26.198 | 184.0 | .388 | 3.37 | 51.9 | | | | | | | 151 |
| 1 | 171 | 8.89 | 8.87 | 33.900 | 26.285 | 176.1 | .426 | 3.28 | 50.3 | 30.8 | 1.92 | 24.5 | .01 | .00 | .07 | 172 |
| 1 | 200 ISL | 8.48 | 8.46 | 33.965 | 26.393 | 166.3 | .476 | 3.17 | 48.2 | | | | | | | 201 |
| 1 | 201 | 8.46 | 8.44 | 33.966 | 26.396 | 166.0 | .477 | 3.17 | 48.1 | 34.4 | 2.03 | 25.9 | .01 | .00 | .04 | 202 |
| 1 | 227 | 8.03 | 8.01 | 34.003 | 26.490 | 157.3 | .519 | 3.02 | 45.4 | 39.0 | 2.14 | 27.5 | .01 | | | 228 |
| 1 | 250 ISL | 7.71 | 7.68 | 34.022 | 26.552 | 151.7 | .555 | 2.79 | 41.7 | | | | | | | 252 |
| 1 | 300 ISL | 7.11 | 7.08 | 34.054 | 26.662 | 141.8 | .628 | 2.25 | 33.2 | | | | | | | 302 |
| 1 | 342 | 6.74 | 6.68 | 34.070 | 26.729 | 135.7 | .687 | 1.74 | 25.4 | 58.4 | 2.71 | 24.6 | .01 | | | 344 |
| 1 | 400 ISL | 6.15 | 6.12 | 34.116 | 26.840 | 125.7 | .763 | 1.14 | 16.4 | | | | | | | 403 |
| 1 | 451 | 5.78 | 5.74 | 34.166 | 26.927 | 117.9 | .825 | 1.0 | 10.0 | 79.0 | 3.19 | 40.2 | .00 | | | 454 |
| 1 | 500 ISL | 5.42 | 5.38 | 34.227 | 26.994 | 112.0 | .881 | .47 | 6.7 | | | | | | | 504 |
| 1 | 554 | 5.52 | 5.48 | 34.294 | 27.060 | 106.4 | .940 | .32 | 4.5 | 88.9 | 3.38 | 41.6 | .00 | | | 558 |
| 1 | 600 ISL | 5.36 | 5.31 | 34.320 | 27.107 | 102.2 | .988 | .32 | 4.6 | | | | | | | 605 |
| 1 | 700 ISL | 5.00 | 4.94 | 34.390 | 27.199 | 94.3 | 1.086 | .33 | 4.6 | | | | | | | 706 |
| 1 | 800 ISL | 4.61 | 4.55 | 34.426 | 27.271 | 87.9 | 1.177 | .34 | 4.7 | | | | | | | 807 |
| 1 | 829 | 4.50 | 4.43 | 34.433 | 27.289 | 86.4 | 1.202 | .34 | 4.7 | 110.4 | 3.48 | 43.8 | .00 | | | 835 |
| 1 | 1000 ISL | 3.94 | 3.91 | 34.485 | 27.386 | 77.9 | 1.343 | .40 | 6.6 | | | | | | | 1009 |
| 1 | 1108 | 3.70 | 3.62 | 34.503 | 27.430 | 74.1 | 1.425 | .63 | 8.6 | 127.1 | 3.47 | 43.9 | .00 | | | 1118 |

RV NEW HORIZON

FRONTS LEG II

STATION 77 2

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD | AMT | TYPE | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-------|------|-------|-------|-------|
| 32 21.3 N | 121 11.0 W | 21/07/85 | 1502 GMT | | 330 | 12 KT | 320 03 | 2 | 1017.6 MB | 15.0 C | 13.9 C | 8/8 | | SC | | |
| CST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SVA | DYN HT | OXYGEN | ORP | SI03 | P04 | N03 | N02 | CHL-A | PHAE0 | PRESS |
| M | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | D.BAR |
| 1 | 0 ISL | 17.25 | 17.25 | 33.310 | 24.160 | 374.8 | .000 | 5.68 | 103.3 | | | | | | | 0 |
| 1 | 1 | 17.25 | 17.25 | 33.310 | 24.160 | 374.8 | .004 | 5.68 | 103.3 | 2.5 | .35 | .2 | .00 | .17 | .01 | 1 |
| 1 | 10 ISL | 17.24 | 17.24 | 33.308 | 24.160 | 375.1 | .037 | 5.74 | 104.4 | | | | | | | 10 |
| 1 | 11 | 17.24 | 17.24 | 33.308 | 24.160 | 375.1 | .041 | 5.75 | 104.4 | 2.4 | .36 | .2 | .00 | .17 | .01 | 11 |
| 1 | 20 ISL | 16.67 | 16.66 | 33.319 | 24.303 | 361.6 | .074 | 5.90 | 106.1 | | | | | | | 20 |
| 1 | 22 | 16.48 | 16.48 | 33.320 | 24.348 | 357.6 | .081 | 5.94 | 106.4 | 2.5 | .38 | .2 | .01 | .24 | .04 | 22 |
| 1 | 30 ISL | 15.46 | 15.45 | 33.273 | 24.543 | 335.2 | .109 | 6.12 | 107.5 | | | | | | | 30 |
| 1 | 33 | 15.07 | 15.06 | 33.254 | 24.614 | 332.6 | .119 | 6.19 | 107.6 | 2.6 | .37 | .2 | .00 | .25 | .06 | 33 |
| 1 | 43 | 14.01 | 14.00 | 33.204 | 24.800 | 315.1 | .151 | 6.27 | 106.8 | 2.4 | .36 | .2 | .00 | .16 | .03 | 43 |
| 1 | 50 ISL | 13.75 | 13.74 | 33.206 | 24.856 | 311.0 | .174 | 6.29 | 106.6 | | | | | | | 50 |
| 1 | 54 | 13.68 | 13.68 | 33.213 | 24.874 | 309.3 | .185 | 6.30 | 106.6 | 2.5 | .38 | .1 | .00 | .19 | .07 | 54 |
| 1 | 64 | 13.40 | 13.39 | 33.236 | 24.949 | 301.4 | .216 | 6.17 | 103.8 | 2.7 | .38 | .1 | .00 | .25 | .11 | 64 |
| 1 | 75 | 12.98 | 12.97 | 33.239 | 25.035 | 297.4 | .248 | 6.10 | 101.8 | 3.0 | .40 | .1 | .01 | .45 | .21 | 75 |
| 1 | 85 | 12.43 | 12.42 | 33.279 | 25.173 | 290.5 | .277 | 5.91 | 97.5 | 4.2 | .64 | 1.3 | .30 | .33 | .11 | 85 |
| 1 | 96 | 11.62 | 11.61 | 33.277 | 25.324 | 266.3 | .307 | 5.59 | 90.6 | 5.7 | .75 | 6.0 | .04 | .19 | .15 | 96 |
| 1 | 100 ISL | 11.48 | 11.47 | 33.337 | 25.396 | 259.5 | .318 | 5.37 | 86.9 | | | | | | | 101 |
| 1 | 106 | 11.37 | 11.35 | 33.420 | 25.482 | 251.5 | .333 | 5.10 | 82.3 | 8.9 | .91 | 9.1 | .04 | .11 | .12 | 106 |
| 1 | 115 | 11.02 | 11.00 | 33.480 | 25.592 | 241.2 | .360 | 4.79 | 76.7 | 11.6 | 1.08 | 11.9 | .03 | .08 | .09 | 117 |
| 1 | 125 ISL | 10.60 | 10.59 | 33.554 | 25.723 | 229.9 | .380 | 4.46 | 70.9 | | | | | | | 126 |
| 1 | 126 | 10.53 | 10.51 | 33.566 | 25.745 | 226.8 | .383 | 4.41 | 70.0 | 15.5 | 1.32 | 15.4 | .02 | .04 | .05 | 127 |
| 1 | 142 | 9.96 | 9.94 | 33.642 | 25.902 | 212.2 | .418 | 4.02 | 63.0 | 20.8 | 1.55 | 19.6 | .01 | .01 | .05 | 143 |
| 1 | 150 ISL | 9.65 | 9.64 | 33.723 | 26.015 | 201.4 | .434 | 3.77 | 58.7 | | | | | | | 151 |
| 1 | 159 | 9.35 | 9.34 | 33.810 | 26.133 | 190.4 | .450 | 3.52 | 54.5 | 25.8 | 1.73 | 22.2 | .01 | | | 159 |
| 1 | 184 | 8.98 | 8.96 | 33.895 | 26.260 | 178.7 | .497 | 3.30 | 50.7 | 29.6 | 1.86 | 24.1 | .01 | | | 185 |
| 1 | 200 ISL | 8.74 | 8.72 | 33.936 | 26.329 | 172.4 | .525 | 3.18 | 48.7 | | | | | | | 201 |
| 1 | 210 | 8.60 | 8.58 | 33.958 | 26.369 | 169.7 | .542 | 3.11 | 47.4 | 33.6 | 1.97 | 25.8 | .00 | | | 211 |
| 1 | 250 ISL | 8.05 | 8.03 | 34.025 | 26.504 | 156.4 | .607 | 2.62 | 39.5 | | | | | | | 252 |
| 1 | 300 ISL | 7.45 | 7.43 | 34.085 | 26.639 | 144.2 | .693 | 1.97 | 29.2 | | | | | | | 302 |
| 1 | 314 | 7.30 | 7.27 | 34.097 | 26.670 | 141.3 | .703 | 1.77 | 26.2 | 52.5 | 2.58 | 33.2 | .00 | | | 316 |
| 1 | 400 ISL | 6.57 | 6.54 | 34.178 | 26.834 | 126.6 | .818 | .98 | 14.2 | | | | | | | 403 |
| 1 | 467 | 6.14 | 6.10 | 34.228 | 26.930 | 119.1 | .900 | .56 | 8.1 | 75.7 | 3.12 | 39.2 | .00 | | | 470 |
| 1 | 500 ISL | 5.93 | 5.89 | 34.253 | 26.977 | 114.0 | .958 | .50 | 7.2 | | | | | | | 504 |
| 1 | 600 ISL | 5.40 | 5.35 | 34.318 | 27.064 | 103.5 | 1.047 | .31 | 4.5 | | | | | | | 605 |
| 1 | 619 | 5.11 | 5.06 | 34.329 | 27.113 | 101.9 | 1.066 | .28 | 4.0 | 92.0 | 3.34 | 41.8 | .00 | | | 623 |

RV NEW HORIZON

FRONTS LEG II

STATION 28 2

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD | AMT | TYPE | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-------|------|-------|-------|-------|
| 32 25.5 N | 121 21.2 W | 21/07/85 | 1745 GMT | | 330 | 13 KT | 330 03 | 1 | 1018.0 MB | 15.6 C | 13.9 C | 7/6 | | SC | | |
| CAST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SVA | DYN HT | OXYGEN | OXY | SI03 | PO4 | NO3 | NO2 | CHL-A | PHAEO | PRESS |
| | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | D.BAR |
| 1 | 0 ISL | 16.84 | 16.84 | 33.317 | 24.261 | 365.3 | .000 | 5.81 | 104.9 | | | | | | | 0 |
| 1 | 1 ISL | 16.84 | 16.84 | 33.317 | 24.261 | 365.2 | .004 | 5.81 | 104.9 | 2.4 | .37 | .2 | .01 | .32 | .01 | 1 |
| 1 | 10 ISL | 16.84 | 16.84 | 33.329 | 24.270 | 364.6 | .036 | 5.87 | 105.9 | | | | | | | 10 |
| 1 | 11 | 16.84 | 16.84 | 33.330 | 24.271 | 364.6 | .040 | 5.87 | 106.0 | 2.4 | .39 | .2 | .01 | .33 | .05 | 11 |
| 1 | 20 ISL | 16.84 | 16.84 | 33.371 | 24.398 | 352.8 | .072 | 5.89 | 105.4 | | | | | | | 20 |
| 1 | 22 | 16.84 | 16.84 | 33.380 | 24.426 | 350.2 | .079 | 5.89 | 105.3 | 2.6 | .44 | 1.0 | .03 | .36 | .06 | 22 |
| 1 | 30 ISL | 16.82 | 16.81 | 33.397 | 24.445 | 348.6 | .107 | 5.88 | 105.1 | | | | | | | 30 |
| 1 | 32 | 16.81 | 16.80 | 33.401 | 24.450 | 348.2 | .114 | 5.88 | 105.1 | 2.9 | .48 | 1.4 | .04 | .30 | .06 | 32 |
| 1 | 42 | 16.10 | 16.10 | 33.373 | 24.476 | 346.0 | .149 | 5.86 | 104.3 | 2.7 | .48 | 1.2 | .03 | .33 | .07 | 42 |
| 1 | 50 ISL | 14.40 | 14.40 | 33.252 | 24.649 | 329.7 | .176 | 6.16 | 106.9 | | | | | | | 50 |
| 1 | 1 | 14.45 | 14.44 | 33.215 | 24.717 | 321.3 | .185 | 6.26 | 107.6 | 2.4 | .42 | .4 | .01 | .31 | .08 | 53 |
| 1 | 1 | 13.72 | 13.71 | 33.200 | 24.857 | 310.1 | .217 | 6.23 | 105.5 | 2.6 | .38 | .0 | .00 | .23 | .07 | 63 |
| 1 | 1 | 13.31 | 13.29 | 33.212 | 24.952 | 301.3 | .247 | 6.20 | 104.1 | 2.6 | .39 | .0 | .00 | .19 | .10 | 73 |
| 1 | 1 | 13.21 | 13.27 | 33.240 | 24.976 | 299.0 | .254 | 6.14 | 103.0 | | | | | | | 76 |
| 1 | 1 | 13.19 | 13.17 | 33.332 | 25.069 | 290.5 | .280 | 5.89 | 98.7 | 3.3 | .43 | .6 | .09 | .22 | .14 | 94 |
| 1 | 1 | 12.59 | 12.57 | 33.295 | 25.156 | 282.3 | .308 | 5.78 | 95.7 | 3.6 | .49 | 1.7 | .15 | .19 | .17 | 101 |
| 1 | 100 ISL | 12.44 | 12.43 | 33.298 | 25.187 | 279.6 | .326 | 5.67 | 93.5 | | | | | | | 101 |
| 1 | 1 | 12.37 | 12.36 | 33.309 | 25.209 | 277.5 | .336 | 5.59 | 92.1 | 4.7 | .61 | 3.5 | .13 | .19 | .16 | 115 |
| 1 | 1 | 11.87 | 11.87 | 33.399 | 25.380 | 261.5 | .365 | 5.25 | 85.6 | 7.4 | .82 | 7.4 | .06 | .10 | .09 | 125 |
| 1 | 1 | 11.51 | 11.51 | 33.430 | 25.562 | 244.2 | .391 | 4.96 | 79.4 | 10.4 | 1.00 | 10.6 | .03 | .06 | .08 | 141 |
| 1 | 125 ISL | 10.94 | 10.96 | 33.443 | 25.570 | 243.4 | .392 | 4.94 | 79.1 | | | | | | | 126 |
| 1 | 1 | 10.40 | 10.39 | 33.583 | 25.780 | 225.7 | .428 | 4.44 | 70.2 | 17.3 | 1.44 | 17.5 | .01 | .01 | .03 | 141 |
| 1 | 1 | 10.22 | 10.00 | 33.661 | 25.907 | 211.8 | .449 | 4.02 | 63.1 | | | | | | | 151 |
| 1 | 1 | 9.81 | 9.79 | 33.700 | 25.972 | 205.7 | .460 | 3.80 | 59.4 | 23.2 | 1.67 | 21.3 | .01 | | | 156 |
| 1 | 1 | 8.93 | 8.91 | 33.828 | 26.214 | 182.9 | .510 | 3.17 | 48.6 | 30.4 | 1.92 | 25.4 | .01 | | | 182 |
| 1 | 200 ISL | 8.71 | 8.68 | 33.872 | 26.285 | 176.5 | .544 | 3.06 | 46.7 | | | | | | | 201 |
| 1 | 207 | 8.66 | 8.63 | 33.883 | 26.301 | 175.1 | .556 | 3.05 | 46.5 | 33.1 | 2.00 | 26.5 | .01 | | | 208 |
| 1 | 250 ISL | 8.04 | 8.03 | 33.957 | 26.450 | 161.5 | .629 | 2.77 | 41.7 | | | | | | | 252 |
| 1 | 300 ISL | 7.34 | 7.34 | 34.031 | 26.608 | 147.0 | .706 | 2.36 | 35.0 | | | | | | | 302 |
| 1 | 309 | 7.24 | 7.21 | 34.043 | 26.636 | 144.5 | .719 | 2.28 | 33.7 | 50.7 | 2.41 | 31.9 | .00 | | | 311 |
| 1 | 400 ISL | 6.45 | 6.45 | 34.149 | 26.823 | 127.6 | .843 | 1.27 | 18.4 | | | | | | | 403 |
| 1 | 467 | 6.11 | 6.07 | 34.207 | 26.918 | 119.2 | .919 | .65 | 9.4 | 76.5 | 3.09 | 39.4 | .00 | | | 465 |
| 1 | 500 ISL | 5.86 | 5.92 | 34.242 | 26.977 | 111.9 | .963 | .65 | 8.0 | | | | | | | 504 |
| 1 | 600 ISL | 5.27 | 5.22 | 34.320 | 27.111 | 101.8 | 1.071 | .33 | 4.6 | | | | | | | 605 |
| 1 | 637 | 5.18 | 5.13 | 34.332 | 27.131 | 100.0 | 1.088 | .29 | 4.1 | 97.3 | 3.34 | 42.6 | .00 | | | 621 |

RV NEW HORIZON

FRONTS LEG II

STATION 29 2

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD | AMT | TYPE | |
|------------|------------|-----------|-----------|--------|-------|--------|--------|---------|-----------|--------|--------|-------|-------|-------|-------|
| 32 15.2 N | 121 01.0 W | 21/07/85 | 2205 GMT | | 320 | 10 KT | 330 03 | 2 | 1016.9 MB | 17.8 C | 15.6 C | 9/8 | | SC | |
| CAST DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SVA | DYN HT | OXYGEN | OXY | SI03 | PO4 | NO3 | NO2 | CHL-A | PHAEO | PRESS |
| M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | D.BAR |
| 0 ISL | 16.87 | 16.87 | 33.276 | 24.223 | 365.8 | .000 | 5.80 | 104.7 | 2.7 | .34 | .1 | .00 | .14 | .02 | 0 |
| 1 | 16.87 | 16.87 | 33.276 | 24.223 | 365.8 | .007 | 5.80 | 104.7 | | | | | | | 2 |
| 10 ISL | 16.86 | 16.86 | 33.276 | 24.225 | 364.9 | .037 | 5.83 | 105.3 | | | | | | | 10 |
| 12 | 16.86 | 16.86 | 33.276 | 24.226 | 364.0 | .044 | 5.84 | 105.4 | 2.6 | .35 | .1 | .00 | .13 | .02 | 12 |
| 20 ISL | 16.82 | 16.81 | 33.273 | 24.233 | 364.5 | .074 | 5.85 | 105.4 | | | | | | | 20 |
| 25 | 16.80 | 16.80 | 33.271 | 24.236 | 364.3 | .085 | 5.85 | 105.5 | 2.7 | .35 | .1 | .00 | .13 | .02 | 23 |
| 30 ISL | 15.81 | 15.81 | 33.269 | 24.461 | 347.0 | .110 | 6.06 | 107.2 | | | | | | | 30 |
| 1 | 15.34 | 15.33 | 33.267 | 24.565 | 337.1 | .120 | 6.16 | 107.9 | 3.0 | .34 | .1 | .00 | .13 | .03 | 33 |
| 1 | 14.23 | 14.22 | 33.200 | 24.751 | 319.7 | .152 | 6.29 | 107.7 | 3.2 | .34 | .1 | .00 | .16 | .03 | 43 |
| 1 | 13.87 | 13.87 | 33.218 | 24.838 | 311.6 | .175 | 6.27 | 106.6 | | | | | | | 50 |
| 1 | 13.73 | 13.73 | 33.226 | 24.874 | 309.3 | .187 | 6.26 | 106.1 | 3.3 | .35 | .1 | .00 | .21 | .07 | 54 |
| 1 | 13.03 | 13.02 | 33.150 | 24.957 | 300.6 | .217 | 6.28 | 104.8 | 3.4 | .38 | .1 | .00 | .31 | .11 | 64 |
| 1 | 12.54 | 12.53 | 33.172 | 25.070 | 290.0 | .249 | 6.16 | 101.8 | 3.9 | .44 | .3 | .04 | .32 | .17 | 75 |
| 1 | 12.19 | 12.18 | 33.243 | 25.192 | 277.7 | .278 | 5.89 | 96.6 | 4.8 | .56 | 2.5 | .18 | .24 | .12 | 85 |
| 1 | 12.22 | 12.21 | 33.345 | 25.265 | 272.0 | .305 | 5.59 | 91.8 | 6.5 | .71 | 5.1 | .18 | .20 | .11 | 95 |
| 100 ISL | 11.85 | 11.84 | 33.377 | 25.360 | 263.0 | .320 | 5.43 | 88.5 | | | | | | | 101 |
| 1 | 11.41 | 11.40 | 33.411 | 25.467 | 252.9 | .334 | 5.23 | 84.5 | 10.0 | .98 | 10.2 | .04 | .11 | .08 | 106 |
| 1 | 11.08 | 11.06 | 33.511 | 25.605 | 240.0 | .358 | 4.73 | 75.9 | 13.3 | 1.13 | 12.8 | .02 | .07 | .11 | 116 |
| 1 | 10.66 | 10.65 | | | | .382 | 4.32 | 68.7 | 16.4 | 1.26 | 15.0 | .02 | .07 | .13 | 126 |
| 1 | 10.07 | 10.05 | 33.723 | 25.947 | 207.9 | .416 | 3.96 | 62.2 | 21.0 | 1.46 | 18.3 | .01 | .03 | .06 | 142 |
| 1 | 9.80 | 9.79 | 33.772 | 26.029 | 200.1 | .434 | 3.78 | 59.0 | | | | | | | 151 |
| 1 | 9.63 | 9.61 | 33.802 | 26.092 | 195.3 | .446 | 3.65 | 56.8 | 25.0 | 1.65 | 20.8 | .01 | | | 157 |
| 1 | 8.93 | 8.91 | 33.902 | 26.273 | 177.4 | .494 | 3.19 | 48.9 | 30.4 | 1.89 | 24.6 | .00 | | | 183 |
| 200 ISL | 8.64 | 8.62 | 33.970 | 26.372 | 168.3 | .525 | 2.93 | 44.7 | | | | | | | 201 |
| 1 | 8.55 | 8.53 | 33.994 | 26.404 | 165.3 | .537 | 2.84 | 43.2 | 36.0 | 2.07 | 26.9 | .00 | | | 203 |
| 250 ISL | 7.89 | 7.87 | 34.058 | 26.554 | 151.6 | .605 | 2.35 | 35.3 | | | | | | | 252 |
| 300 ISL | 7.21 | 7.18 | 34.071 | 26.662 | 141.1 | .678 | 1.88 | 27.7 | | | | | | | 302 |
| 1 | 7.08 | 7.08 | 34.078 | 26.682 | 140.0 | .690 | 1.81 | 26.7 | 55.1 | 2.57 | 33.7 | .01 | | | 310 |
| 400 ISL | 6.33 | 6.30 | 34.159 | 26.851 | 125.8 | .811 | 1.00 | 14.5 | | | | | | | 403 |
| 1 | 5.96 | 5.93 | 34.213 | 26.939 | 117.0 | .886 | .59 | 8.5 | 78.7 | 3.13 | 39.9 | .00 | | | 465 |
| 500 ISL | 5.75 | 5.71 | 34.246 | 26.993 | 112.2 | .930 | .52 | 7.4 | | | | | | | 504 |
| 600 ISL | 5.27 | 5.22 | 34.326 | 27.115 | 101.3 | 1.037 | .32 | 4.6 | | | | | | | 605 |
| 1 | 5.20 | 5.15 | 34.339 | 27.134 | 99.7 | 1.054 | .29 | 4.1 | 96.5 | 3.31 | 42.5 | .00 | | | 622 |

RV NEW HORIZON

FRONTS LEG II

STATION 30 2

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE | | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-----------|------|-------|-------|-------|
| 32 10.0 N | 120 50.6 W | 22/07/85 | 0050 GMT | | 320 | 11 KT | 330 03 | 2 | 1016.3 MB | 16.7 C | 15.0 C | 8/A | SC | | | |
| CST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SVA | DYN HT | OXYGEN | OXY | S103 | P04 | N03 | N02 | CML-A | PHAF0 | PRFSS |
| | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | 0.BAR |
| 1 | 0 ISL | 16.70 | 16.70 | 33.351 | 24.321 | 359.6 | .000 | 5.91 | 106.4 | | | | | | | 0 |
| 1 | 2 | 16.70 | 16.70 | 33.351 | 24.321 | 359.5 | .007 | 5.91 | 106.4 | 2.7 | .39 | .0 | .00 | .15 | .04 | 2 |
| 1 | 10 ISL | 16.65 | 16.65 | 33.342 | 24.326 | 359.3 | .036 | 5.99 | 107.6 | | | | | | | 10 |
| 1 | 12 | 16.63 | 16.63 | 33.338 | 24.327 | 359.3 | .043 | 5.99 | 107.7 | 2.7 | .40 | .0 | .00 | .13 | .04 | 12 |
| 1 | 20 ISL | 16.53 | 16.53 | 33.323 | 24.338 | 358.5 | .072 | 5.94 | 106.5 | | | | | | | 20 |
| 1 | 27 | 16.50 | 16.50 | 33.320 | 24.343 | 358.1 | .079 | 5.92 | 106.1 | 2.5 | .39 | .0 | .00 | .12 | .03 | 27 |
| 1 | 30 ISL | 16.34 | 16.33 | 33.319 | 24.380 | 354.8 | .108 | 5.95 | 106.3 | | | | | | | 30 |
| 1 | 33 | 16.28 | 16.27 | 33.318 | 24.393 | 353.7 | .118 | 5.96 | 106.4 | 2.6 | .40 | .0 | .00 | .12 | .04 | 33 |
| 1 | 43 | 14.26 | 14.25 | 33.276 | 24.803 | 314.8 | .151 | 6.26 | 107.3 | 2.9 | .38 | .0 | .00 | .25 | .09 | 43 |
| 1 | 50 ISL | 13.61 | 13.60 | 33.214 | 24.890 | 306.6 | .173 | 6.32 | 106.8 | | | | | | | 50 |
| 1 | 53 | 13.46 | 13.45 | 33.197 | 24.906 | 305.1 | .182 | 6.34 | 106.8 | 2.9 | .41 | .0 | .00 | .30 | .09 | 53 |
| 1 | 63 | 13.02 | 13.01 | 33.282 | 25.060 | 290.7 | .211 | 6.06 | 101.2 | 3.7 | .44 | 1.2 | .07 | .33 | .12 | 63 |
| 1 | 75 | 12.83 | 12.82 | 33.317 | 25.126 | 284.7 | .240 | 5.91 | 98.3 | 4.4 | .57 | 2.8 | .17 | .28 | .14 | 75 |
| 1 | 75 ISL | 12.81 | 12.80 | 33.336 | 25.143 | 283.1 | .247 | 5.85 | 97.3 | | | | | | | 76 |
| 1 | 84 | 12.72 | 12.71 | 33.422 | 25.228 | 275.3 | .271 | 5.54 | 92.0 | 6.1 | .68 | 4.7 | .17 | .25 | .15 | 84 |
| 1 | 94 | 12.51 | 12.50 | 33.499 | 25.368 | 262.2 | .297 | 5.09 | 85.9 | 8.1 | .83 | 7.8 | .14 | .21 | .14 | 94 |
| 1 | 100 ISL | 11.68 | 11.66 | 33.530 | 25.510 | 248.7 | .314 | 4.82 | 78.4 | | | | | | | 101 |
| 1 | 104 | 11.35 | 11.34 | 33.543 | 25.580 | 242.1 | .323 | 4.70 | 75.9 | 11.7 | 1.06 | 11.8 | .08 | .12 | .16 | 104 |
| 1 | 113 | 11.22 | 11.21 | 33.575 | 25.629 | 237.7 | .346 | 4.56 | 73.4 | 12.9 | 1.12 | 12.7 | .07 | .07 | .09 | 113 |
| 1 | 123 | 10.62 | 10.61 | 33.636 | 25.783 | 223.1 | .369 | 4.25 | 67.6 | 16.7 | 1.32 | 15.9 | .03 | .06 | .10 | 123 |
| 1 | 125 ISL | 10.54 | 10.52 | 33.643 | 25.803 | 221.2 | .373 | 4.21 | 66.7 | | | | | | | 126 |
| 1 | 139 | 9.94 | 9.92 | 33.690 | 25.942 | 208.2 | .401 | 3.87 | 60.6 | 21.4 | 1.58 | 19.9 | .02 | .02 | .05 | 139 |
| 1 | 150 ISL | 9.58 | 9.57 | 33.728 | 26.031 | 199.9 | .425 | 3.66 | 56.9 | | | | | | | 151 |
| 1 | 154 | 9.47 | 9.46 | 33.743 | 26.061 | 197.1 | .434 | 3.59 | 55.7 | 24.8 | 1.72 | 22.2 | .01 | | | 155 |
| 1 | 179 | 8.72 | 8.71 | 33.788 | 26.196 | 185.9 | .456 | 3.01 | 46.1 | 31.4 | 1.95 | 25.5 | .02 | | | 180 |
| 1 | 200 ISL | 8.57 | 8.55 | 33.988 | 26.417 | 164.0 | .523 | 2.70 | 41.1 | 36.8 | 2.14 | 27.8 | .03 | | | 201 |
| 1 | 204 | 8.54 | 8.52 | 34.008 | 26.417 | 164.0 | .523 | 2.70 | 41.1 | 36.8 | 2.14 | 27.8 | .03 | | | 205 |
| 1 | 250 ISL | 8.02 | 7.99 | 34.123 | 26.586 | 148.6 | .595 | 2.04 | 30.8 | | | | | | | 252 |
| 1 | 300 ISL | 7.57 | 7.47 | 34.164 | 26.697 | 138.7 | .666 | 1.39 | 20.7 | | | | | | | 302 |
| 1 | 304 | 7.44 | 7.43 | 34.164 | 26.704 | 138.2 | .672 | 1.34 | 19.9 | 55.4 | 2.71 | 34.2 | .01 | | | 306 |
| 1 | 400 ISL | 6.81 | 6.78 | 34.244 | 26.854 | 125.0 | .798 | .73 | 10.6 | | | | | | | 403 |
| 1 | 455 | 6.46 | 6.44 | 34.266 | 26.914 | 119.9 | .866 | .56 | 8.1 | 73.0 | 3.14 | 38.7 | .01 | | | 458 |
| 1 | 500 ISL | 6.19 | 6.14 | 34.284 | 26.969 | 115.0 | .918 | .49 | 7.1 | | | | | | | 504 |
| 1 | 600 ISL | 5.45 | 5.40 | 34.306 | 27.079 | 105.0 | 1.029 | .34 | 4.8 | | | | | | | 605 |
| 1 | 610 | 5.37 | 5.32 | 34.307 | 27.089 | 104.1 | 1.039 | .32 | 4.5 | 92.5 | 3.32 | 42.3 | .00 | | | 614 |

RV NEW HORIZON

FRONTS LEG II

STATION 31 2

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE | | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-----------|------|-------|-------|-------|
| 32 05.2 N | 120 41.2 W | 22/07/85 | 0330 GMT | | 320 | 18 KT | 330 03 | 2 | 1015.9 MB | 15.0 C | 14.4 C | 8/A | SC | | | |
| CAST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SVA | DYN HT | OXYGEN | OXY | S103 | P04 | N03 | N02 | CML-A | PHAE0 | PRFSS |
| | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | 0.BAR |
| 1 | 0 ISL | 16.93 | 16.93 | 33.387 | 24.293 | 362.1 | .000 | 5.81 | 105.1 | | | | | | | 0 |
| 1 | 1 | 16.93 | 16.93 | 33.387 | 24.293 | 362.1 | .004 | 5.81 | 105.1 | 2.5 | .41 | .1 | .00 | .15 | .03 | 1 |
| 1 | 10 ISL | 16.93 | 16.93 | 33.384 | 24.292 | 362.6 | .036 | 5.83 | 105.4 | | | | | | | 10 |
| 1 | 11 | 16.93 | 16.93 | 33.384 | 24.292 | 362.6 | .040 | 5.83 | 105.4 | 2.4 | .41 | .0 | .00 | .14 | .03 | 11 |
| 1 | 20 ISL | 16.55 | 16.55 | 33.361 | 24.362 | 356.2 | .072 | 5.89 | 105.8 | | | | | | | 20 |
| 1 | 22 | 16.39 | 16.38 | 33.351 | 24.393 | 353.3 | .079 | 5.92 | 105.9 | 2.3 | .41 | .0 | .00 | .15 | .04 | 22 |
| 1 | 30 ISL | 14.95 | 14.95 | 33.291 | 24.667 | 327.4 | .107 | 6.18 | 107.5 | | | | | | | 30 |
| 1 | 32 | 14.63 | 14.62 | 33.282 | 24.729 | 321.5 | .113 | 6.24 | 107.7 | 2.6 | .40 | .0 | .00 | .17 | .04 | 32 |
| 1 | 42 | 14.24 | 14.23 | 33.286 | 24.815 | 313.6 | .144 | 6.24 | 106.9 | 2.7 | .40 | .0 | .00 | .20 | .06 | 50 |
| 1 | 50 ISL | 13.80 | 13.79 | 33.339 | 24.947 | 301.2 | .169 | 6.12 | 103.9 | | | | | | | 50 |
| 1 | 52 | 13.70 | 13.70 | 33.350 | 24.976 | 298.5 | .175 | 6.09 | 103.2 | 3.4 | .44 | .1 | .01 | .34 | .11 | 52 |
| 1 | 62 | 13.31 | 13.30 | 33.355 | 25.060 | 290.8 | .204 | 6.00 | 100.9 | 3.8 | .54 | 1.7 | .09 | .34 | .13 | 62 |
| 1 | 72 | 12.71 | 12.70 | 33.348 | 25.173 | 290.3 | .232 | 5.95 | 98.8 | 4.5 | .67 | 3.6 | .20 | .35 | .16 | 72 |
| 1 | 75 ISL | 12.57 | 12.56 | 33.348 | 25.200 | 277.7 | .242 | 5.88 | 97.4 | | | | | | | 76 |
| 1 | 83 | 12.27 | 12.26 | 33.359 | 25.266 | 271.6 | .263 | 5.67 | 93.3 | 5.7 | .77 | 5.5 | .21 | .35 | .16 | 83 |
| 1 | 93 | 11.80 | 11.79 | 33.400 | 25.386 | 260.3 | .289 | 5.34 | 87.0 | 7.6 | .93 | 8.3 | .07 | .26 | .18 | 93 |
| 1 | 100 ISL | 11.44 | 11.43 | 33.449 | 25.488 | 250.8 | .308 | 5.06 | 81.8 | | | | | | | 101 |
| 1 | 104 | 11.34 | 11.32 | 33.468 | 25.525 | 247.3 | .314 | 4.96 | 80.0 | 10.9 | 1.11 | 11.6 | .06 | .17 | .11 | 104 |
| 1 | 112 | 10.78 | 10.77 | 33.551 | 25.688 | 231.9 | .338 | 4.60 | 73.4 | 14.5 | 1.31 | 15.0 | .04 | .10 | .06 | 113 |
| 1 | 122 | 10.34 | 10.32 | 33.636 | 25.832 | 218.4 | .361 | 4.29 | 67.8 | 18.7 | 1.54 | 18.5 | .02 | .06 | .07 | 123 |
| 1 | 125 ISL | 10.26 | 10.24 | 33.659 | 25.865 | 215.3 | .366 | 4.14 | 65.3 | | | | | | | 126 |
| 1 | 137 | 9.92 | 9.90 | 33.761 | 26.002 | 202.5 | .392 | 3.45 | 54.1 | 24.6 | 1.78 | 21.7 | .02 | .06 | .07 | 138 |
| 1 | 150 ISL | 9.56 | 9.55 | 33.824 | 26.110 | 192.4 | .417 | 3.18 | 49.5 | | | | | | | 151 |
| 1 | 152 | 9.51 | 9.49 | 33.833 | 26.126 | 190.9 | .421 | 3.16 | 49.1 | 28.1 | 1.93 | 23.7 | .01 | | | 152 |
| 1 | 177 | 9.05 | 9.04 | 33.985 | 26.382 | 167.4 | .467 | | | | | | | | | 178 |
| 1 | 200 ISL | 8.65 | 8.63 | 33.985 | 26.382 | 167.4 | .467 | 2.70 | 41.2 | | | | | | | 201 |
| 1 | 204 | 8.60 | 8.58 | 33.994 | 26.396 | 166.0 | .512 | 2.68 | 40.8 | 36.5 | 2.20 | 27.5 | .01 | | | 204 |
| 1 | 250 ISL | 8.04 | 8.02 | 34.097 | 26.562 | 150.9 | .586 | 2.05 | 30.8 | | | | | | | 252 |
| 1 | 300 ISL | 7.60 | 7.57 | 34.166 | 26.681 | 140.3 | .659 | 1.35 | 20.1 | | | | | | | 302 |
| 1 | 301 | 7.59 | 7.56 | 34.167 | 26.684 | 140.1 | .661 | 1.33 | 19.8 | 54.7 | 2.80 | 33.8 | .01 | | | 303 |
| 1 | 400 ISL | 6.67 | 6.63 | 34.232 | 26.864 | 123.9 | .791 | .68 | 10.0 | | | | | | | 403 |
| 1 | 449 | 6.27 | 6.24 | 34.249 | 26.937 | 118.0 | .851 | .53 | 7.7 | 75.9 | 3.23 | 39.2 | .01 | | | 452 |
| 1 | 500 ISL | 5.92 | 5.87 | 34.282 | 27.002 | 111.6 | .909 | .44 | 6.3 | | | | | | | 504 |
| 1 | 594 | 5.40 | 5.36 | 34.347 | 27.116 | 101.6 | 1.009 | .28 | 4.0 | 93.0 | 3.44 | 42.0 | .01 | | | 598 |

RV NEW HORIZON

FRONTS LEG 11

STATION 32 2

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | POTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WFT | CLOUD | AMT | TYPE | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-------|------|-------|-------|-------|
| 32 01.0 N | 120 30.9 W | 22/07/85 | 0622 GMT | | 310 | 15 KT | 330 04 | 2 | 1016.5 MB | 14.4 C | 14.9 C | R/P | | SC | | |
| CASE | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SVA | DYN HT | OXYGEN | OXY | SIO3 | PO4 | NO3 | NO2 | CHL-A | PHAEO | PRESS |
| | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | D.BAR |
| 1 | 0 | 17.06 | 17.06 | 33.605 | 24.431 | 349.0 | .000 | 5.83 | 105.8 | 2.7 | .34 | .1 | .03 | .18 | .06 | 0 |
| 1 | 10 | 17.06 | 17.06 | 33.606 | 24.432 | 349.2 | .035 | 5.82 | 105.7 | 2.7 | .36 | .1 | .03 | .18 | .04 | 10 |
| 1 | 20 | 16.64 | 16.64 | 33.596 | 24.523 | 340.9 | .069 | 5.90 | 106.2 | | | | | | | 20 |
| 1 | 21 | 16.56 | 16.56 | 33.593 | 24.539 | 339.4 | .073 | 5.91 | 106.3 | 2.6 | .36 | .3 | .05 | .21 | .05 | 21 |
| 1 | 30 | 15.05 | 15.05 | 33.576 | 24.833 | 311.6 | .102 | 6.04 | 105.4 | | | | | | | 30 |
| 1 | 31 | 14.89 | 14.89 | 33.531 | 24.866 | 308.5 | .105 | 6.05 | 105.2 | 3.6 | .51 | 1.9 | .11 | .31 | .07 | 31 |
| 1 | 41 | 13.44 | 13.44 | 33.506 | 25.149 | 281.7 | .134 | 5.96 | 100.6 | 5.0 | .66 | 4.0 | .18 | .32 | .07 | 41 |
| 1 | 50 | 12.66 | 12.65 | 33.545 | 25.334 | 264.3 | .159 | 5.63 | 93.6 | | | | | | | 50 |
| 1 | 52 | 12.53 | 12.52 | 33.555 | 25.367 | 261.2 | .164 | 5.54 | 91.7 | 7.5 | .86 | 7.4 | .27 | .32 | .08 | 52 |
| 1 | 62 | 11.56 | 11.55 | 33.601 | 25.586 | 240.5 | .189 | 4.78 | 77.6 | 12.3 | 1.14 | 12.1 | .29 | .28 | .11 | 62 |
| 1 | 71 | 11.25 | 11.24 | 33.614 | 25.654 | 234.4 | .215 | 4.51 | 77.7 | 14.1 | 1.23 | 13.9 | .25 | .19 | .11 | 71 |
| 1 | 75 | 11.23 | 11.22 | 33.615 | 25.657 | 234.0 | .220 | 4.49 | 72.3 | | | | | | | 75 |
| 1 | 81 | 11.16 | 11.15 | 33.632 | 25.702 | 230.0 | .238 | 4.35 | 69.8 | 15.6 | 1.30 | 15.1 | .23 | .16 | .09 | 81 |
| 1 | 91 | 10.14 | 10.11 | 33.710 | 25.921 | 209.1 | .260 | 3.75 | 59.0 | 21.5 | 1.58 | 19.8 | .05 | .09 | .06 | 91 |
| 1 | 101 | 9.64 | 9.64 | 33.717 | 25.961 | 208.5 | .275 | 3.68 | 57.7 | | | | | | | 101 |
| 1 | 104 | 9.49 | 9.49 | 33.726 | 25.974 | 204.4 | .282 | 3.65 | 57.2 | 22.7 | 1.61 | 20.5 | .04 | .07 | .06 | 104 |
| 1 | 111 | 9.44 | 9.44 | 33.870 | 26.130 | 189.8 | .302 | 3.03 | 47.2 | 27.6 | 1.85 | 23.5 | .03 | .03 | .05 | 111 |
| 1 | 125 | 9.57 | 9.56 | 33.901 | 26.168 | 186.5 | .321 | 2.91 | 45.3 | 29.0 | 1.89 | 24.1 | .02 | .03 | .05 | 124 |
| 1 | 125 | 9.55 | 9.55 | 33.905 | 26.175 | 185.7 | .324 | 2.91 | 45.2 | | | | | | | 126 |
| 1 | 132 | 9.25 | 9.25 | 33.925 | 26.232 | 180.5 | .348 | 2.89 | 44.7 | 30.5 | 1.95 | 24.9 | .02 | .02 | .04 | 130 |
| 1 | 151 | 8.97 | 8.97 | 33.941 | 26.294 | 174.9 | .369 | 2.91 | 44.7 | | | | | | | 151 |
| 1 | 151 | 8.91 | 8.90 | 33.945 | 26.309 | 173.4 | .374 | 2.91 | 44.6 | 32.9 | 1.99 | 25.9 | .02 | | | 154 |
| 1 | 179 | 8.64 | 8.62 | 33.979 | 26.379 | 167.2 | .418 | 2.75 | 41.9 | 35.4 | 2.06 | 26.7 | .02 | | | 180 |
| 1 | 201 | 8.32 | 8.30 | 34.038 | 26.473 | 158.5 | .453 | 2.48 | 37.6 | | | | | | | 201 |
| 1 | 205 | 8.25 | 8.23 | 34.052 | 26.496 | 156.4 | .460 | 2.41 | 36.4 | 41.4 | 2.22 | 28.9 | .02 | | | 206 |
| 1 | 250 | 7.79 | 7.79 | 34.123 | 26.616 | 145.7 | .528 | 1.86 | 27.9 | | | | | | | 250 |
| 1 | 301 | 7.45 | 7.44 | 34.162 | 26.697 | 138.8 | .589 | 1.35 | 20.1 | | | | | | | 301 |
| 1 | 301 | 7.47 | 7.43 | 34.163 | 26.700 | 138.5 | .604 | 1.32 | 19.4 | 55.4 | 2.66 | 33.9 | .02 | | | 305 |
| 1 | 401 | 6.7 | 6.66 | 34.229 | 26.857 | 124.6 | .731 | .71 | 10.4 | | | | | | | 403 |
| 1 | 451 | 6.51 | 6.49 | 34.256 | 26.928 | 119.3 | .792 | .53 | 7.7 | 74.9 | 3.06 | 39.0 | .01 | | | 453 |
| 1 | 501 | 5.79 | 5.95 | 34.290 | 26.998 | 112.1 | .850 | .45 | 6.5 | | | | | | | 504 |
| 1 | 59 | 5.41 | 5.55 | 34.356 | 27.124 | 100.7 | .955 | .30 | 4.2 | 92.8 | 3.25 | 41.8 | .01 | | | 608 |

PL NEW HORIZON

FRONTS LEG 11

STATION 33 3

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | POTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WFT | CLOUD | AMT | TYPE | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-------|------|-------|-------|-------|
| 33 56.3 N | 120 12.4 W | 22/07/85 | 1005 GMT | | 310 | 13 KT | 330 04 | 2 | 1016.3 MB | 14.4 C | 15.0 C | R/P | | SC | | |
| CASE | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SVA | DYN HT | OXYGEN | OXY | SIO3 | PO4 | NO3 | NO2 | CHL-A | PHAEO | PRESS |
| | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | D.BAR |
| 1 | 0 ISL | 17.72 | 17.72 | 33.588 | 24.260 | 365.3 | .000 | 5.64 | 103.7 | | | | | | | 0 |
| 1 | 1 | 17.72 | 17.72 | 33.588 | 24.260 | 365.3 | .004 | 5.64 | 103.7 | 2.6 | .24 | .1 | .00 | .11 | .02 | 1 |
| 1 | 10 ISL | 17.72 | 17.72 | 33.587 | 24.259 | 365.7 | .037 | 5.67 | 104.2 | | | | | | | 10 |
| 1 | 11 | 17.72 | 17.72 | 33.587 | 24.259 | 365.7 | .040 | 5.67 | 104.3 | 2.5 | .24 | .1 | .00 | .11 | .01 | 11 |
| 1 | 20 ISL | 17.64 | 17.68 | 33.587 | 24.268 | 365.2 | .073 | 5.67 | 104.2 | | | | | | | 20 |
| 1 | 21 | 17.65 | 17.68 | 33.587 | 24.269 | 365.2 | .076 | 5.67 | 104.2 | 2.4 | .25 | .1 | .00 | .11 | .01 | 21 |
| 1 | 30 ISL | 16.32 | 16.37 | 33.525 | 24.530 | 340.5 | .108 | 5.96 | 106.8 | | | | | | | 30 |
| 1 | 31 | 16.20 | 16.20 | 33.519 | 24.564 | 337.3 | .112 | 6.00 | 107.1 | 2.5 | .26 | .1 | .00 | .15 | .02 | 31 |
| 1 | 41 | 14.14 | 14.13 | 33.458 | 24.969 | 299.0 | .143 | 6.32 | 108.1 | 2.8 | .31 | .2 | .02 | .45 | .08 | 41 |
| 1 | 50 | 13.46 | 13.45 | 33.479 | 25.175 | 284.3 | .169 | 6.12 | 103.3 | 4.0 | .40 | 1.5 | .05 | .80 | .14 | 50 |
| 1 | 60 | 12.73 | 12.72 | 33.510 | 25.294 | 268.3 | .197 | 5.57 | 97.6 | 6.3 | .61 | 4.9 | .12 | .67 | .23 | 60 |
| 1 | 70 | 11.92 | 11.92 | 33.554 | 25.483 | 250.6 | .223 | 4.92 | 80.4 | 10.2 | .89 | 9.5 | .21 | .39 | .17 | 70 |
| 1 | 75 ISL | 11.65 | 11.64 | 33.571 | 25.548 | 244.5 | .236 | 4.69 | 76.2 | | | | | | | 76 |
| 1 | 80 | 11.43 | 11.42 | 33.588 | 25.602 | 239.5 | .247 | 4.51 | 73.0 | 13.0 | 1.08 | 12.7 | .27 | .27 | .19 | 80 |
| 1 | 90 | 10.84 | 10.83 | 33.642 | 25.748 | 225.7 | .270 | 4.05 | 64.7 | 16.4 | 1.27 | 15.7 | .20 | .20 | .19 | 90 |
| 1 | 100 | 10.27 | 10.26 | 33.768 | 25.946 | 207.1 | .292 | 3.29 | 52.0 | 22.6 | 1.59 | 20.7 | .04 | .10 | .11 | 100 |
| 1 | 109 | 10.12 | 10.10 | 33.789 | 25.989 | 203.1 | .312 | 3.22 | 50.7 | 21.6 | 1.64 | 21.5 | .03 | .08 | .10 | 110 |
| 1 | 119 | 9.85 | 9.83 | 33.844 | 26.078 | 194.9 | .332 | 3.02 | 47.3 | 26.2 | 1.78 | 22.9 | .05 | .13 | .13 | 120 |
| 1 | 125 ISL | 9.73 | 9.71 | 33.868 | 26.116 | 191.3 | .345 | 2.96 | 46.2 | | | | | | | 126 |
| 1 | 134 | 9.56 | 9.54 | 33.901 | 26.170 | 186.3 | .360 | 2.88 | 44.8 | 28.7 | 1.86 | 24.4 | .02 | .03 | .06 | 135 |
| 1 | 149 | 9.37 | 9.32 | 33.954 | 26.248 | 179.3 | .387 | 2.74 | 42.4 | 31.2 | 1.94 | 25.4 | .02 | | | 150 |
| 1 | 150 ISL | 9.32 | 9.31 | 33.956 | 26.252 | 178.9 | .389 | 2.73 | 42.3 | | | | | | | 151 |
| 1 | 174 | 8.81 | 8.80 | | | | .431 | | | | | | | | | 175 |
| 1 | 200 | 8.42 | 8.40 | 34.035 | 26.456 | 160.2 | .473 | 2.44 | 37.0 | 39.3 | 2.12 | 28.6 | .01 | | | 201 |
| 1 | 250 | 7.89 | 7.87 | 34.107 | 26.593 | 148.0 | .550 | 1.89 | 28.4 | | | | | | | 252 |
| 1 | 300 | 7.47 | 7.47 | 34.167 | 26.698 | 138.7 | .622 | 1.29 | 19.2 | 55.1 | 2.61 | 34.1 | .01 | | | 302 |
| 1 | 400 | 6.71 | 6.67 | 34.246 | 26.870 | 123.4 | .753 | .64 | 9.4 | | | | | | | 408 |
| 1 | 455 | 6.13 | 6.29 | 34.276 | 26.944 | 116.8 | .819 | .44 | 6.4 | 76.8 | 3.02 | 39.0 | .00 | | | 458 |
| 1 | 500 | 6.04 | 5.99 | 34.302 | 27.002 | 111.7 | .871 | .39 | 5.5 | | | | | | | 504 |
| 1 | 600 | 5.49 | 5.43 | 34.348 | 27.109 | 102.3 | .978 | .26 | 3.7 | | | | | | | 605 |
| 1 | 612 | 5.42 | 5.37 | 34.353 | 27.119 | 101.3 | .989 | .25 | 3.5 | 93.2 | 3.33 | 41.8 | .00 | | | 616 |

RV NEW HORIZON

FRONTS LEG II

STATION 34 2

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVFS | WEATHER | BAROMETER | DRY | WET | CLOUD | AMT | TYPE | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-------|------|-------|-------|-------|
| 31 50.7 N | 120 09.8 W | 22/07/85 | 1300 GMT | | 310 | 13 KT | 340 04 | 2 | 1016.5 MP | 15.6 C | 14.4 C | 9/8 | | CU | | |
| CST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SWA | DYN HT | OXYGEN | OXY | SI03 | PO4 | NO3 | NO2 | CML-A | PHAEO | PRESS |
| | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | D.BAR |
| 1 | 0 ISL | 18.06 | 18.06 | 33.582 | 24.173 | 373.7 | .000 | 5.61 | 103.8 | | | | | | | 1 |
| 1 | 1 | 18.06 | 18.06 | 33.582 | 24.173 | 373.6 | .004 | 5.61 | 103.8 | 2.4 | .26 | .1 | .00 | .11 | .01 | 1 |
| 1 | 10 ISL | 18.04 | 18.03 | 33.589 | 24.185 | 372.8 | .037 | 5.64 | 104.3 | | | | | | | 10 |
| 1 | 11 | 18.03 | 18.03 | 33.590 | 24.186 | 372.7 | .041 | 5.64 | 104.3 | 2.3 | .25 | .1 | .00 | .11 | .01 | 11 |
| 1 | 20 ISL | 17.23 | 17.23 | 33.591 | 24.358 | 356.6 | .074 | 5.82 | 106.0 | | | | | | | 20 |
| 1 | 22 | 17.01 | 17.01 | 33.553 | 24.403 | 352.4 | .081 | 5.87 | 106.4 | 2.2 | .27 | .1 | .00 | .14 | .02 | 22 |
| 1 | 30 ISL | 16.28 | 16.28 | 33.525 | 24.552 | 338.4 | .109 | 6.04 | 108.0 | | | | | | | 30 |
| 1 | 32 | 16.04 | 16.04 | 33.518 | 24.600 | 333.9 | .115 | 6.08 | 108.1 | 2.2 | .27 | .1 | .00 | .17 | .03 | 32 |
| 1 | 42 | 13.71 | 13.71 | 33.476 | 25.071 | 289.2 | .146 | 6.25 | 106.0 | 3.4 | .36 | .7 | .02 | .74 | .11 | 42 |
| 1 | 50 ISL | 13.35 | 13.34 | 33.472 | 25.146 | 281.1 | .169 | 6.04 | 101.6 | | | | | | | 50 |
| 1 | 52 | 13.27 | 13.26 | 33.478 | 25.163 | 280.7 | .174 | 5.97 | 100.5 | 4.4 | .45 | 2.6 | .06 | .60 | .13 | 52 |
| 1 | 61 | 12.79 | 12.78 | 33.559 | 25.320 | 244.0 | .204 | 5.72 | 95.2 | 6.4 | .68 | 5.1 | .16 | .65 | .21 | 61 |
| 1 | 74 | 12.06 | 12.05 | 33.596 | 25.491 | 250.0 | .232 | 5.01 | 87.1 | 10.0 | .94 | 9.4 | .30 | .37 | .16 | 74 |
| 1 | 75 ISL | 11.94 | 11.93 | 33.599 | 25.514 | 247.7 | .236 | 4.92 | 80.5 | | | | | | | 75 |
| 1 | 84 | 11.25 | 11.24 | 33.630 | 25.666 | 233.4 | .256 | 4.32 | 69.6 | 14.4 | 1.20 | 14.4 | .33 | .19 | .12 | 84 |
| 1 | 94 | 10.74 | 10.73 | 33.695 | 25.791 | 221.8 | .279 | 3.62 | 57.9 | 18.3 | 1.45 | 18.2 | .05 | .16 | .14 | 94 |
| 1 | 101 ISL | 10.57 | 10.55 | 33.729 | 25.865 | 214.8 | .293 | 3.42 | 54.4 | | | | | | | 101 |
| 1 | 105 | 10.37 | 10.35 | 33.754 | 25.919 | 209.7 | .303 | 3.34 | 52.9 | 22.0 | 1.57 | 20.5 | .02 | .10 | .10 | 105 |
| 1 | 114 | 9.92 | 9.90 | 33.833 | 26.057 | 196.8 | .323 | 3.11 | 48.8 | 26.0 | 1.74 | 22.9 | .02 | .05 | .06 | 114 |
| 1 | 124 | 9.77 | 9.76 | 33.859 | 26.102 | 192.7 | .342 | 2.99 | 46.7 | 26.9 | 1.79 | 23.5 | .01 | .04 | .05 | 124 |
| 1 | 125 ISL | 9.74 | 9.74 | 33.860 | 26.105 | 192.4 | .343 | 2.99 | 46.7 | | | | | | | 125 |
| 1 | 147 | 9.32 | 9.31 | 33.889 | 26.199 | 183.7 | .372 | 2.92 | 45.2 | 30.1 | 1.88 | 25.0 | .01 | .01 | .05 | 147 |
| 1 | 157 ISL | 9.11 | 9.10 | 33.922 | 26.259 | 179.1 | .390 | 2.82 | 43.4 | | | | | | | 157 |
| 1 | 155 | 9.01 | 9.00 | 33.941 | 26.290 | 175.3 | .399 | 2.76 | 42.6 | 32.4 | 1.97 | 26.3 | .00 | | | 155 |
| 1 | 181 | 8.44 | 8.40 | 34.005 | 26.403 | 165.0 | .443 | 2.54 | 38.7 | 36.2 | 2.08 | 27.2 | .01 | | | 181 |
| 1 | 200 ISL | 8.25 | 8.23 | 34.073 | 26.511 | 154.9 | .473 | 2.26 | 34.2 | | | | | | | 200 |
| 1 | 207 | 8.12 | 8.10 | 34.097 | 26.550 | 151.3 | .484 | 2.15 | 32.4 | 43.2 | 2.31 | 30.7 | .00 | | | 207 |
| 1 | 250 ISL | 7.63 | 7.61 | 34.165 | 26.676 | 140.0 | .547 | 1.62 | 24.2 | | | | | | | 250 |
| 1 | 300 ISL | 7.27 | 7.24 | 34.182 | 26.741 | 133.7 | .615 | 1.14 | 16.9 | | | | | | | 300 |
| 1 | 304 | 7.23 | 7.20 | 34.180 | 26.753 | 131.4 | .626 | 1.08 | 16.0 | 59.5 | 2.74 | 35.4 | .00 | | | 304 |
| 1 | 400 ISL | 6.50 | 6.47 | 34.243 | 26.895 | 120.9 | .743 | .59 | 9.6 | | | | | | | 400 |
| 1 | 462 | 6.09 | 6.05 | 34.273 | 26.973 | 114.0 | .815 | .43 | 6.2 | 79.7 | 3.09 | 40.0 | .00 | | | 462 |
| 1 | 500 ISL | 5.87 | 5.82 | 34.294 | 27.017 | 110.1 | .858 | .39 | 5.6 | | | | | | | 500 |
| 1 | 600 ISL | 5.42 | 5.37 | 34.348 | 27.116 | 101.5 | .964 | .30 | 4.2 | | | | | | | 600 |
| 1 | 619 | 5.35 | 5.30 | 34.359 | 27.132 | 100.2 | .983 | .28 | 4.0 | 93.8 | 3.24 | 41.8 | .00 | | | 619 |

RV NEW HORIZON

FRONTS LEG II

STATION 35 2

| LATITUDE | | LONGITUDE | | DAY/MO/YR | | MESSENGER | | BOTTOM | | WIND | | SPEED | | WAVFS | | WEATHER | | BAROMETER | | DRY | | WET | | CLCUD | | AMT | | TYPE | | | | | |
|-----------|---------|------------|-------|-----------|--------|-----------|------|----------|-------|-------|------|-------|-----|--------|-----|---------|--|-----------|--|--------|--|--------|--|-------|--|------|--|-------|--|-------|-----|-------|--|
| 31 46.5 N | | 119 59.1 W | | 22/07/85 | | 1540 GMT | | | | 310 | | 13 KT | | 340 04 | | 2 | | 1016.9 MP | | 14.4 C | | 13.9 C | | 9/8 | | | | SC | | | | | |
| CAST | | DEPTH | | TEMP | | POT TEMP | | SALINITY | | SIGMA | | SWA | | DYN HT | | OXYGEN | | OXY | | SI03 | | PO4 | | NO3 | | NO2 | | CML-A | | PHAEO | | PRESS | |
| | | M | | DEG C | | DEG C | | | | THETA | | | | | | ML/L | | PCT | | UM/L | | UM/L | | UM/L | | UM/L | | UG/L | | UG/L | | D.BAR | |
| 1 | 0 ISL | 17.60 | 17.60 | 33.584 | 24.286 | 362.8 | .000 | 5.70 | 104.6 | | | | | | | | | | | | | | | | | | | | | 0 | | | |
| 1 | 2 | 17.60 | 17.60 | 33.584 | 24.286 | 362.9 | .007 | 5.70 | 104.6 | 2.6 | .27 | .1 | .00 | .15 | .02 | | | | | | | | | | | | | | | 2 | | | |
| 1 | 10 ISL | 17.54 | 17.59 | 33.580 | 24.285 | 363.2 | .036 | 5.74 | 105.2 | | | | | | | | | | | | | | | | | | | | | | 10 | | |
| 1 | 12 | 17.59 | 17.59 | 33.580 | 24.286 | 363.2 | .043 | 5.74 | 105.3 | 2.5 | .27 | .0 | .00 | .13 | .01 | | | | | | | | | | | | | | | | 12 | | |
| 1 | 20 ISL | 17.57 | 17.57 | 33.580 | 24.291 | 363.0 | .073 | 5.73 | 105.1 | | | | | | | | | | | | | | | | | | | | | | 20 | | |
| 1 | 23 | 17.56 | 17.56 | 33.581 | 24.293 | 363.0 | .083 | 5.73 | 105.0 | 2.4 | .26 | .0 | .00 | .14 | .01 | | | | | | | | | | | | | | | | 23 | | |
| 1 | 30 ISL | 17.07 | 17.06 | 33.571 | 24.404 | 352.6 | .109 | 5.94 | 107.9 | | | | | | | | | | | | | | | | | | | | | | 30 | | |
| 1 | 37 | 16.66 | 16.68 | 33.559 | 24.483 | 345.1 | .119 | 6.06 | 109.2 | 2.5 | .27 | .0 | .00 | .19 | .03 | | | | | | | | | | | | | | | | 37 | | |
| 1 | 43 | 14.20 | 14.20 | 33.475 | 24.969 | 299.0 | .151 | 6.47 | 110.9 | 2.9 | .30 | .0 | .00 | | | | | | | | | | | | | | | | | | 43 | | |
| 1 | 50 ISL | 13.90 | 12.99 | 33.514 | 25.244 | 272.9 | .171 | 5.98 | 100.0 | | | | | | | | | | | | | | | | | | | | | | 50 | | |
| 1 | 54 | 12.56 | 12.55 | 33.544 | 25.354 | 262.5 | .181 | 5.62 | 93.1 | 6.7 | .67 | 5.1 | .17 | .66 | .24 | | | | | | | | | | | | | | | | 54 | | |
| 1 | 64 | 12.01 | 12.00 | 33.573 | 25.481 | 250.6 | .207 | 5.00 | 81.9 | 10.3 | .96 | 9.3 | .29 | .45 | .18 | | | | | | | | | | | | | | | | 64 | | |
| 1 | 75 | 11.49 | 11.48 | 33.618 | 25.613 | 239.3 | .234 | 4.49 | 72.7 | 13.3 | 1.15 | 12.5 | .39 | .30 | .18 | | | | | | | | | | | | | | | | 75 | | |
| 1 | 85 | 10.83 | 10.82 | 33.669 | 25.771 | 223.5 | .257 | 4.00 | 63.9 | 18.0 | 1.40 | 16.9 | .13 | .19 | .10 | | | | | | | | | | | | | | | | 85 | | |
| 1 | 95 | 10.45 | 10.44 | 33.696 | 25.859 | 215.2 | .278 | 3.78 | 59.9 | 20.3 | 1.50 | 18.9 | .06 | .15 | .10 | | | | | | | | | | | | | | | | 95 | | |
| 1 | 100 ISL | 10.27 | 10.26 | 33.720 | 25.909 | 210.5 | .290 | 3.63 | 57.3 | | | | | | | | | | | | | | | | | | | | | | 101 | | |
| 1 | 106 | 10.10 | 10.09 | 33.747 | 25.959 | 205.9 | .301 | 3.48 | 54.8 | 23.6 | 1.63 | 21.0 | .02 | .11 | .09 | | | | | | | | | | | | | | | | 106 | | |
| 1 | 114 | 9.82 | 9.80 | 33.789 | 26.039 | 199.5 | .321 | 3.29 | 51.5 | 25.6 | 1.73 | 22.4 | .01 | .08 | .04 | | | | | | | | | | | | | | | | 114 | | |
| 1 | 125 | 9.54 | 9.52 | 33.835 | 26.122 | 190.8 | .341 | 3.10 | 48.2 | 27.9 | 1.83 | 23.6 | .01 | .03 | .05 | | | | | | | | | | | | | | | | 126 | | |
| 1 | 141 | 9.26 | 9.25 | 33.895 | 26.214 | 182.3 | .370 | 2.86 | 44.2 | 30.8 | 1.93 | 25.1 | .01 | .01 | .04 | | | | | | | | | | | | | | | | 142 | | |
| 1 | 150 ISL | 9.12 | 9.10 | 33.928 | 26.263 | 177.8 | .386 | 2.77 | 42.7 | | | | | | | | | | | | | | | | | | | | | | 151 | | |
| 1 | 157 | 9.00 | 8.98 | 33.952 | 26.300 | 174.3 | .399 | 2.71 | 41.7 | 33.5 | 2.02 | 26.4 | .01 | | | | | | | | | | | | | | | | | | 158 | | |
| 1 | 182 | 8.67 | 8.66 | 34.003 | 26.392 | 166.1 | .441 | 2.55 | 38.9 | 36.0 | 2.09 | 27.3 | .03 | | | | | | | | | | | | | | | | | | 183 | | |
| 1 | 200 ISL | 8.48 | 8.46 | 34.040 | 26.452 | 160.6 | .470 | 2.42 | 36.7 | | | | | | | | | | | | | | | | | | | | | | 201 | | |
| 1 | 207 | 8.41 | 8.38 | 34.054 | 26.474 | 158.7 | .481 | 2.36 | 35.8 | 39.7 | 2.20 | 28.7 | .02 | | | | | | | | | | | | | | | | | | 208 | | |
| 1 | 250 ISL | 7.99 | 7.96 | 34.112 | 26.582 | 149.0 | .548 | 1.93 | 29.0 | | | | | | | | | | | | | | | | | | | | | | 252 | | |
| 1 | 300 ISL | 7.54 | 7.51 | 34.156 | 26.683 | 140.1 | .620 | 1.42 | 21.2 | | | | | | | | | | | | | | | | | | | | | | 302 | | |
| 1 | 308 | 7.47 | 7.44 | 34.161 | 26.696 | 138.9 | .631 | 1.34 | 19.9 | 54.5 | 2.63 | 33.8 | .01 | | | | | | | | | | | | | | | | | | 310 | | |
| 1 | 400 ISL | 6.64 | 6.66 | 34.231 | 26.860 | 124.3 | .752 | .73 | 10.7 | | | | | | | | | | | | | | | | | | | | | | 403 | | |
| 1 | 462 | 6.23 | 6.19 | 34.269 | 26.951 | 116.1 | .827 | .47 | 6.8 | 76.5 | 3.07 | 39.2 | .01 | | | | | | | | | | | | | | | | | | 465 | | |
| 1 | 500 ISL | 5.99 | 5.94 | 34.294 | 27.002 | 111.6 | .870 | .42 | 6.0 | | | | | | | | | | | | | | | | | | | | | | 504 | | |
| 1 | 600 ISL | 5.47 | 5.42 | 34.351 | 27.111 | 102.0 | .977 | .28 | 4.0 | | | | | | | | | | | | | | | | | | | | | | 605 | | |
| 1 | 616 | 5.41 | 5.36 | 34.359 | 27.125 | 100.8 | .993 | .26 | 3.7 | 93.8 | 3.24 | 41.7 | .01 | | | | | | | | | | | | | | | | | | 620 | | |

RV NEW HORIZON

FRONTS LEG 11

STATION 36 2

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD | AMT | TYPE | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-------|------|-------|-------|-------|
| 31 35.2 N | 119 33.8 W | 22/07/85 | 1934 GMT | | 320 | 10 KT | 340 04 | 2 | 1016.5 MB | 16.7 C | 15.6 C | | | SC | | |
| CST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SVA | DYN HT | OXYGEN | OXY | SI03 | P04 | N03 | N02 | CHL-A | PHAEO | PRESS |
| " | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | DBAR |
| 1 | 0 ISL | 19.09 | 19.09 | 33.691 | 24.000 | 390.1 | .000 | 5.47 | 103.3 | 2.4 | .25 | .2 | .00 | .16 | .01 | 0 |
| 1 | 2 | 19.09 | 19.09 | 33.691 | 24.000 | 390.1 | .000 | 5.47 | 103.3 | | | | | | | 2 |
| 1 | 10 ISL | 19.08 | 19.08 | 33.690 | 24.002 | 390.2 | .009 | 5.48 | 103.4 | | | | | | | 12 |
| 1 | 12 | 19.08 | 19.07 | 33.690 | 24.003 | 390.2 | .047 | 5.48 | 103.5 | 2.4 | .24 | .2 | .00 | .16 | .02 | 12 |
| 1 | 20 ISL | 16.93 | 16.93 | 33.645 | 24.493 | 343.8 | .076 | 6.07 | 109.9 | | | | | | | 20 |
| 1 | 28 | 16.00 | 16.00 | 33.637 | 24.701 | 324.0 | .086 | 6.28 | 111.7 | 2.9 | .29 | .2 | .00 | .26 | .01 | 30 |
| 1 | 30 ISL | 14.55 | 14.55 | 33.616 | 25.004 | 295.3 | .138 | 6.29 | 108.7 | | | | | | | 30 |
| 1 | 35 | 14.06 | 14.05 | 33.607 | 25.100 | 286.2 | .116 | 6.30 | 107.7 | 4.6 | .43 | 1.6 | .05 | .95 | .07 | 33 |
| 1 | 47 | 12.66 | 12.65 | 33.566 | 25.351 | 262.6 | .144 | 5.65 | 93.8 | 7.5 | .69 | 5.7 | .14 | 1.24 | .25 | 43 |
| 1 | 50 ISL | 11.73 | 11.73 | 33.596 | 25.550 | 245.7 | .162 | 4.83 | 78.7 | | | | | | | 50 |
| 1 | 53 | 11.44 | 11.43 | 33.613 | 25.618 | 237.3 | .168 | 4.53 | 73.3 | 13.5 | 1.13 | 12.6 | .26 | .49 | .15 | 53 |
| 1 | 64 | 10.96 | 10.95 | 33.657 | 25.739 | 226.1 | .194 | 4.12 | 66.0 | 16.8 | 1.33 | 16.0 | .21 | .34 | .16 | 64 |
| 1 | 73 | 10.45 | 10.44 | 33.701 | 25.862 | 214.4 | .213 | 3.81 | 60.4 | 20.1 | 1.49 | 18.7 | .07 | .24 | .11 | 73 |
| 1 | 75 ISL | 10.33 | 10.32 | 33.712 | 25.893 | 211.5 | .218 | 3.74 | 59.1 | | | | | | | 74 |
| 1 | 83 | 9.98 | 9.97 | 33.748 | 25.940 | 203.4 | .234 | 3.54 | 55.5 | 23.1 | 1.62 | 20.8 | .02 | .11 | .09 | 83 |
| 1 | 92 | 9.79 | 9.78 | 33.779 | 26.036 | 198.3 | .252 | 3.40 | 53.1 | 24.9 | 1.70 | 21.9 | .02 | .07 | .04 | 92 |
| 1 | 100 ISL | 9.62 | 9.61 | 33.812 | 26.090 | 191.3 | .269 | 3.26 | 50.8 | | | | | | | 100 |
| 1 | 108 | 9.58 | 9.56 | 33.821 | 26.104 | 191.9 | .273 | 3.22 | 50.1 | 26.8 | 1.76 | 23.1 | .02 | .05 | .05 | 108 |
| 1 | 112 | 9.46 | 9.45 | 33.849 | 26.145 | 185.3 | .292 | 3.11 | 48.3 | 28.1 | 1.82 | 23.9 | .01 | .03 | .04 | 112 |
| 1 | 121 | 9.26 | 9.25 | 33.892 | 26.211 | 182.2 | .309 | 2.93 | 45.3 | 30.3 | 1.92 | 25.0 | .01 | .02 | .04 | 121 |
| 1 | 125 ISL | 9.22 | 9.20 | 33.901 | 26.226 | 180.8 | .315 | 2.90 | 44.8 | | | | | | | 126 |
| 1 | 137 | 9.08 | 9.07 | 33.928 | 26.268 | 177.0 | .338 | 2.83 | 43.6 | 32.5 | 1.99 | 25.9 | .01 | .01 | .04 | 137 |
| 1 | 150 ISL | 8.98 | 8.96 | 33.973 | 26.336 | 170.7 | .360 | 2.64 | 40.5 | | | | | | | 151 |
| 1 | 152 | 8.84 | 8.82 | 33.981 | 26.348 | 169.6 | .363 | 2.61 | 40.0 | 35.0 | 2.07 | 27.1 | .01 | | | 153 |
| 1 | 175 | 8.53 | 8.52 | | | | .401 | | | | | | | | | 176 |
| 1 | 200 ISL | 8.25 | 8.23 | 34.064 | 26.505 | 155.5 | .441 | 2.31 | 35.0 | | | | | | | 201 |
| 1 | 201 | 8.24 | 8.22 | 34.065 | 26.507 | 155.3 | .442 | 2.31 | 34.9 | 41.7 | 2.22 | 29.2 | .02 | | | 202 |
| 1 | 250 ISL | 7.66 | 7.66 | 34.121 | 26.634 | 143.9 | .516 | 1.81 | 27.0 | | | | | | | 252 |
| 1 | 294 | 7.18 | 7.15 | 34.160 | 26.737 | 134.7 | .583 | 1.25 | 18.5 | 58.8 | 2.69 | 34.9 | .01 | | | 300 |
| 1 | 301 ISL | 7.11 | 7.13 | 34.162 | 26.761 | 134.4 | .585 | 1.24 | 18.2 | | | | | | | 302 |
| 1 | 400 ISL | 6.40 | 6.37 | 34.239 | 26.904 | 119.9 | .713 | .60 | 8.7 | | | | | | | 403 |
| 1 | 447 | 6.12 | 6.08 | 34.269 | 26.965 | 114.6 | .768 | .43 | 6.2 | 78.2 | 3.09 | 39.6 | .00 | | | 450 |
| 1 | 500 ISL | 5.82 | 5.78 | 34.304 | 27.031 | 108.7 | .827 | .38 | 5.4 | | | | | | | 504 |
| 1 | 600 ISL | 5.35 | 5.30 | 34.364 | 27.136 | 99.6 | .931 | .27 | 3.9 | | | | | | | 605 |
| 1 | 603 | 5.34 | 5.29 | 34.366 | 27.138 | 99.3 | .934 | .27 | 3.8 | 95.1 | 3.25 | 42.0 | .00 | | | 607 |

RV NEW HORIZON

FRONTS LEG 11

STATION 37 2

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD | AMT | TYPE | | |
|-----------|------------|-----------|-----------|----------|--------|-------|--------|---------|-----------|--------|--------|-------|------|-------|-------|-------|
| 31 20.5 N | 119 02.5 W | 22/07/85 | 2339 GMT | | 320 | 11 KT | 330 04 | 2 | 1014.9 MB | 17.8 C | 14.7 C | | | SC | | |
| CST | DEPTH | TEMP | POT TEMP | SALINITY | SIGMA | SVA | DYN HT | OXYGEN | OXY | SI03 | P04 | N03 | N02 | CHL-A | PHAEO | PRESS |
| " | M | DEG C | DEG C | | THETA | | | ML/L | PCT | UM/L | UM/L | UM/L | UM/L | UG/L | UG/L | DBAR |
| 1 | 0 ISL | 19.01 | 19.01 | 33.645 | 23.984 | 391.6 | .000 | 5.50 | 103.7 | 2.5 | .24 | .2 | .00 | .16 | .01 | 0 |
| 1 | 1 | 19.01 | 19.01 | 33.645 | 23.984 | 391.7 | .004 | 5.50 | 103.7 | | | | | | | 1 |
| 1 | 10 ISL | 19.02 | 19.02 | 33.644 | 23.981 | 392.3 | .039 | 5.56 | 104.8 | | | | | | | 10 |
| 1 | 11 | 19.02 | 19.02 | 33.644 | 23.980 | 392.3 | .043 | 5.56 | 104.8 | 2.4 | .25 | .2 | .00 | .15 | .01 | 11 |
| 1 | 20 ISL | 14.92 | 14.92 | 33.632 | 24.022 | 394.7 | .078 | 5.58 | 104.9 | | | | | | | 20 |
| 1 | 28 | 14.78 | 14.79 | 33.629 | 24.031 | 397.0 | .086 | 5.59 | 104.9 | 2.3 | .25 | .2 | .00 | .15 | .01 | 22 |
| 1 | 30 ISL | 12.07 | 12.03 | 33.574 | 24.415 | 351.5 | .116 | 6.04 | 109.5 | | | | | | | 30 |
| 1 | 32 | 16.56 | 16.49 | 33.558 | 24.527 | 340.9 | .122 | 6.15 | 110.4 | 2.3 | .30 | .2 | .01 | .34 | .05 | 32 |
| 1 | 42 | 13.61 | 13.59 | 33.417 | 25.049 | 291.3 | .154 | 6.41 | 108.4 | 3.7 | .46 | 2.2 | .09 | .74 | .16 | 42 |
| 1 | 50 ISL | 12.78 | 12.77 | 33.443 | 25.263 | 271.1 | .177 | 5.93 | 98.7 | | | | | | | 50 |
| 1 | 53 | 12.65 | 12.64 | 33.515 | 25.313 | 266.4 | .184 | 5.71 | 94.8 | 6.6 | .69 | 5.6 | .18 | .69 | .18 | 53 |
| 1 | 68 | 11.83 | 11.82 | 33.572 | 25.514 | 247.4 | .210 | 5.21 | 85.0 | 10.0 | 1.01 | 11.1 | .29 | .34 | .07 | 63 |
| 1 | 74 | 11.13 | 11.12 | 33.611 | 25.674 | 232.5 | .236 | 4.75 | 76.4 | 13.8 | 1.23 | 15.0 | .10 | .19 | .04 | 74 |
| 1 | 75 ISL | 11.03 | 11.02 | 33.619 | 25.699 | 230.3 | .239 | 4.66 | 74.7 | | | | | | | 76 |
| 1 | 84 | 10.45 | 10.44 | 33.674 | 25.842 | 216.6 | .259 | 4.05 | 64.7 | 19.1 | 1.45 | 19.6 | .04 | .07 | .03 | 84 |
| 1 | 94 | 9.52 | 9.51 | 33.725 | 25.973 | 204.3 | .279 | 3.72 | 58.3 | 22.6 | 1.60 | 20.9 | .02 | .05 | .05 | 94 |
| 1 | 100 ISL | 9.66 | 9.65 | 33.765 | 26.047 | 197.4 | .292 | 3.51 | 54.7 | | | | | | | 101 |
| 1 | 105 | 9.52 | 9.51 | 33.795 | 26.092 | 193.1 | .301 | 3.37 | 52.4 | 26.5 | 1.72 | 22.9 | .01 | .02 | .03 | 105 |
| 1 | 114 | 9.39 | 9.36 | 33.865 | 26.172 | 185.8 | .320 | 3.08 | 47.7 | 29.4 | 1.85 | 24.5 | .01 | .02 | .03 | 115 |
| 1 | 124 | 9.18 | 9.14 | 33.906 | 26.236 | 179.9 | .338 | 2.89 | 44.6 | 31.4 | 1.93 | 25.4 | .01 | .02 | .04 | 125 |
| 1 | 125 ISL | 9.16 | 9.15 | 33.910 | 26.241 | 179.4 | .339 | 2.88 | 44.4 | | | | | | | 126 |
| 1 | 141 | 8.82 | 8.81 | 33.973 | 26.345 | 163.7 | .366 | 2.74 | 42.0 | 35.1 | 2.05 | 27.1 | .01 | .00 | .03 | 141 |
| 1 | 151 ISL | 8.71 | 8.73 | 33.985 | 26.366 | 162.9 | .382 | 2.71 | 41.5 | | | | | | | 151 |
| 1 | 155 | 8.72 | 8.70 | 33.988 | 26.373 | 162.4 | .391 | 2.70 | 41.3 | 35.7 | 2.06 | 27.4 | .01 | | | 156 |
| 1 | 181 | 8.35 | 8.39 | | | | .433 | | | | | | | | | 182 |
| 1 | 207 ISL | 8.23 | 8.23 | 34.038 | 26.523 | 153.8 | .462 | 2.08 | 31.4 | | | | | | | 201 |
| 1 | 207 | 8.21 | 8.19 | 34.101 | 26.540 | 152.3 | .473 | 1.97 | 29.8 | 43.5 | 2.35 | 30.7 | .02 | | | 204 |
| 1 | 251 ISL | 7.77 | 7.74 | 34.141 | 26.637 | 142.7 | .537 | 1.57 | 23.4 | | | | | | | 252 |
| 1 | 300 ISL | 7.12 | 7.19 | 34.159 | 26.729 | 135.4 | .607 | 1.29 | 19.1 | | | | | | | 302 |
| 1 | 307 | 7.12 | 7.09 | 34.160 | 26.745 | 134.1 | .619 | 1.26 | 18.6 | 58.5 | 2.71 | 35.2 | .01 | | | 311 |
| 1 | 400 ISL | 6.47 | 6.43 | 34.230 | 26.889 | 121.5 | .735 | .73 | 10.5 | | | | | | | 403 |
| 1 | 461 | 6.12 | 6.08 | 34.277 | 26.972 | 114.1 | .809 | .45 | 6.5 | 78.7 | 3.10 | 34.8 | .01 | | | 464 |
| 1 | 500 ISL | 5.91 | 5.86 | 34.301 | 27.018 | 111.1 | .851 | .41 | 5.8 | | | | | | | 504 |
| 1 | 600 ISL | 5.40 | 5.35 | 34.356 | 27.125 | 101.7 | .956 | .28 | 4.0 | | | | | | | 605 |
| 1 | 621 | 5.40 | 5.25 | 34.366 | 27.144 | 101.0 | .977 | .26 | 3.7 | 94.5 | 3.27 | 42.4 | .00 | | | 625 |

RV NEW HORIZON

FRONTS I

STATION 7

LATITUDE LONGITUDE MO/DAY/YR MESSENGER SECCHI DEPTH INCUBATION TIME LAN CIVIL TWILIGHT INTEGRATED VALUE
 33°12.7'N 118°59.5'W 07/02/85 2049 GMT 15 m 1312 - 2034 PST 1300 PST 2034 PST 805.8 mg C/m2

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ml/L | OXY PCT | SI03 um/l | PO4 um/l | NO3 um/l | NO2 um/l | CHL ug/l | PHAEO ug/l | LIGHT % | 1 | UPTAKE (mgC/m3) 2 | MEAN | DARK |
|------------|---------------|----------|----------------|-----------------|------------|--------------|-------------|-------------|-------------|-------------|---------------|------------|------|----------------------|------|------|
| 0 | 17.84 | 33.709 | 24.324 | 6.06 | 111.8 | 1.8 | 0.23 | 0.3 | 0.02 | 0.60 | 0.03 | 91 | 10.4 | 10.6 | 10.5 | 0.24 |
| 10 | 17.46 | 33.708 | 24.415 | 6.37 | 116.6 | 1.7 | 0.23 | 0.2 | 0.01 | 0.60 | 0.04 | 34 | 31.6 | 31.8 | 31.7 | 0.36 |
| 13 | 15.83 | 33.689 | 24.779 | 6.74 | 119.5 | 1.8 | 0.34 | 0.7 | 0.00 | 0.88 | 0.08 | 24 | - | - | - | - |
| 20 | 13.78 | 33.637 | 25.181 | 6.47 | 110.0 | 2.1 | 0.38 | 2.7 | 0.11 | 1.10 | 0.03 | 12 | 23.0 | 23.3 | 23.2 | 0.40 |
| 22 | 13.60 | 33.670 | 25.243 | 6.25 | 105.9 | 3.1 | 0.47 | 3.7 | 0.14 | 1.14 | 0.16 | 10 | 16.7 | 15.6 | 16.2 | 0.24 |
| 55 | 11.32 | 33.735 | 25.734 | 4.45 | 71.9 | 9.8 | 1.06 | 11.3 | 0.37 | 0.68 | 0.25 | 0.4 | 0.7 | 1.1 | 0.9 | 0.17 |

RV NEW HORIZON

FRONTS I

STATION Prodo XBT

LATITUDE LONGITUDE MO/DAY/YR MESSENGER SECCHI DEPTH INCUBATION TIME LAN CIVIL TWILIGHT INTEGRATED VALUE
 32°13.9'N 119°51.4'W 07/03/85 2030 GMT 16 m 1302 - 2036 PST 1302 PST 2036 PST 390.5 mg C/m2

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ml/L | OXY PCT | SI03 um/l | PO4 um/l | NO3 um/l | NO2 um/l | CHL ug/l | PHAEO ug/l | LIGHT % | 1 | UPTAKE (mgC/m3) 2 | MEAN | DARK |
|------------|---------------|----------|----------------|-----------------|------------|--------------|-------------|-------------|-------------|-------------|---------------|------------|------|----------------------|------|------|
| 0 | 17.09 | 33.562 | 24.391 | | | 1.8 | 0.41 | 0.8 | 0.00 | 0.25 | 0.04 | 91 | 5.0 | 6.3 | 5.6 | 0.19 |
| 10 | 16.95 | 33.575 | 24.434 | | | 1.8 | 0.30 | 0.5 | 0.01 | 0.26 | 0.04 | 34 | 15.9 | 16.4 | 16.1 | 0.21 |
| 14 | 16.74 | 33.596 | 24.499 | | | 1.5 | 0.25 | 0.5 | 0.01 | 0.41 | 0.02 | 24 | - | - | - | - |
| 21 | 16.18 | 33.615 | 24.643 | | | 1.1 | 0.24 | 0.5 | 0.01 | 0.38 | 0.08 | 12 | 14.8 | 14.4 | 14.6 | 0.25 |
| 23 | 15.99 | 33.626 | 24.695 | | | 1.0 | 0.31 | 0.7 | 0.04 | 0.46 | 0.09 | 10 | 4.7 | 4.4 | 4.6 | 0.26 |
| 58 | 11.60 | 33.616 | 25.591 | | | 6.6 | 0.86 | 8.6 | 0.18 | 0.40 | 0.21 | 0.4 | 0.58 | 0.95 | 0.77 | 0.15 |

RV NEW HORIZON

FRONTS I

STATION 20

LATITUDE LONGITUDE MO/DAY/YR MESSENGER SECCHI DEPTH INCUBATION TIME LAN CIVIL TWILIGHT INTEGRATED VALUE
 31°01.4'N 119°56.7'W 07/04/85 1845 GMT 24 m 1304 - 2035 PST 1304 PST 2035 PST 140.1 mg C/m2

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ml/L | OXY PCT | SI03 um/l | PO4 um/l | NO3 um/l | NO2 um/l | CHL ug/l | PHAEO ug/l | LIGHT % | 1 | UPTAKE (mgC/m3) 2 | MEAN | DARK |
|------------|---------------|----------|----------------|-----------------|------------|--------------|-------------|-------------|-------------|-------------|---------------|------------|------|----------------------|------|------|
| 1 | 17.71 | 33.335 | 24.069 | 6.01 | 110.3 | 1.6 | 0.27 | 0.1 | 0.00 | 0.11 | 0.01 | 91 | 2.1 | 1.1 | 1.6 | 0.16 |
| 17 | 17.72 | 33.439 | 24.146 | 5.94 | 109.1 | 1.2 | 0.27 | 0.1 | 0.00 | 0.10 | 0.02 | 34 | 5.1 | 5.0 | 5.0 | 0.17 |
| 22 | 17.43 | 33.636 | 24.367 | 5.92 | 108.5 | 1.3 | 0.22 | 0.0 | 0.00 | 0.06 | 0.01 | 24 | - | - | - | - |
| 34 | 16.60 | 33.596 | 24.532 | 5.88 | 105.8 | 1.0 | 0.21 | 0.1 | 0.00 | 0.06 | 0.01 | 12 | 1.7 | 1.7 | 1.7 | 0.19 |
| 37 | 16.41 | 33.588 | 24.570 | 6.17 | 110.6 | 0.8 | 0.21 | 0.1 | 0.00 | 0.06 | 0.01 | 10 | 0.09 | 0.47 | 0.28 | 0.19 |
| 88 | 13.31 | 33.565 | 25.222 | 5.36 | 90.2 | 2.2 | 0.52 | 2.2 | 0.02 | 0.38 | 0.14 | 0.4 | 0.56 | 0.9 | 0.73 | 0.10 |

RV NEW HORIZON

FRONTS I

STATION 28

LATITUDE LONGITUDE MO/DAY/YR MESSENGER SECCHI DEPTH INCUBATION TIME LAN CIVIL TWILIGHT INTEGRATED VALUE
 33°18.6'N 120°46.4'W 07/05/85 1953 GMT 23 m 1305 - 2036 PST 1305 PST 2036 PST 651.6 mg C/m2

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ml/L | OXY PCT | SI03 um/l | PO4 um/l | NO3 um/l | NO2 um/l | CHL ug/l | PHAEO ug/l | LIGHT % | 1 | UPTAKE (mgC/m3) 2 | MEAN | DARK |
|------------|---------------|----------|----------------|-----------------|------------|--------------|-------------|-------------|-------------|-------------|---------------|------------|------|----------------------|------|------|
| 0 | 16.03 | 33.510 | 24.596 | 6.54 | 116.3 | 2.5 | 0.41 | 1.0 | 0.00 | 0.48 | 0.03 | 91 | 7.4 | 7.2 | 7.3 | 0.16 |
| 15 | 15.97 | 33.501 | 24.603 | 6.24 | 110.8 | 2.0 | 0.51 | 1.4 | 0.00 | 0.55 | 0.03 | 34 | 19.1 | 23.6 | 21.3 | 0.25 |
| 21 | 15.96 | 33.502 | 24.606 | 6.33 | 112.4 | 1.9 | 0.39 | 1.0 | 0.03 | 0.51 | 0.10 | 24 | - | - | - | - |
| 32 | 15.93 | 33.501 | 24.613 | | | 1.5 | 0.36 | 1.0 | 0.00 | 0.58 | 0.10 | 12 | 14.3 | 13.6 | 14.0 | 0.21 |
| 34 | 15.82 | 33.496 | 24.634 | 6.39 | 113.1 | 1.4 | 0.32 | 1.0 | 0.02 | 0.65 | 0.13 | 10 | 4.6 | 3.8 | 4.2 | 0.19 |
| 84 | 10.90 | 33.608 | 25.712 | 4.76 | 76.1 | 9.9 | 1.27 | 14.7 | 0.00 | 0.18 | 0.13 | 0.4 | 0.64 | 0.48 | 0.56 | 0.14 |

* Dark uptake exceeded light uptake.

RV NEW HORIZON

FRONTS I

STATION 37

LATITUDE LONGITUDE MO/DAY/YR MESSENGER SECCHI DEPTH INCUBATION TIME LAN CIVIL TWILIGHT INTEGRATED VALUE
 30°41.0'N 120°33.2'W 07/06/85 1925 GMT 39 m 1307-2035 PST 1307 PST 2035 PST 267.1 mg C/m2

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ml/L | OXY PCT | SI03 um/l | PO4 um/l | NO3 um/l | NO2 um/l | CHL ug/l | PHAEO ug/l | LIGHT % | 1 | UPTAKE (mgC/m3) 2 | MEAN | DARK |
|------------|---------------|----------|----------------|-----------------|------------|--------------|-------------|-------------|-------------|-------------|---------------|------------|------|----------------------|------|------|
| 0 | 18.74 | 33.606 | 24.022 | 5.84 | 109.5 | 1.6 | 0.28 | 0.4 | 0.00 | 0.07 | 0.01 | 91 | 1.1 | 0.61 | 0.85 | 0.16 |
| 26 | 17.71 | 33.508 | 24.202 | 5.61 | 103.3 | 1.7 | 0.27 | 0.4 | 0.00 | 0.08 | 0.01 | 34 | 3.9 | 4.1 | 4.0 | 0.17 |
| 35 | 16.21 | 33.403 | 24.474 | 6.16 | 109.9 | 1.7 | 0.30 | 0.2 | 0.00 | 0.10 | 0.01 | 24 | - | - | - | - |
| 54 | 15.38 | 33.521 | 24.751 | 6.10 | 107.1 | 1.6 | 0.25 | 0.2 | 0.00 | 0.13 | 0.03 | 12 | 3.8 | 3.7 | 3.7 | 0.16 |
| 58 | 15.30 | 33.509 | 24.760 | 5.94 | 104.1 | 1.8 | 0.28 | 0.3 | 0.02 | 0.14 | 0.03 | 10 | 1.9 | 1.8 | 1.8 | 0.15 |
| 141 | 11.20 | 33.637 | 25.682 | 4.53 | 72.9 | 7.3 | 0.73 | 7.3 | 0.00 | 0.09 | 0.07 | 0.4 | 0.19 | 0.27 | 0.23 | 0.12 |

RV NEW HORIZON

FRONTS I

STATION 45

| LATITUDE | | LONGITUDE | | MO/DAY/YR | | MESSENGER | | SECCHI DEPTH | | INCUBATION TIME | | LAN | | CIVIL TWILIGHT | | INTEGRATED VALUE | |
|-----------|-------|------------|--------|-----------|-------|-----------|------|--------------|------|-----------------|-------|----------|-----------------|----------------|------|------------------|--|
| 32°51.6'N | | 121°42.5'W | | 07/07/85 | | 2022 GMT | | 22 m | | 1311 - 2046 PST | | 1311 PST | | 2046 PST | | 349.8 mg C/m2 | |
| DEPTH | TEMP | SALINITY | SIGMA | DISS O2 | OXY | SIO3 | PO4 | NO3 | NO2 | CHL | PHAEO | LIGHT | UPTAKE (mgC/m3) | | DARK | | |
| | | | | | | | | | | | | | MEAN | | | | |
| m | DEG C | | THETA | ml/L | PCT | um/l | um/l | um/l | um/l | ug/l | ug/l | % | 1 | 2 | | | |
| 0 | 16.66 | 33.228 | 24.235 | 6.13 | 110.2 | 0.8 | 0.20 | 0.4 | 0.00 | 0.17 | 0.01 | 91 | 3.8 | 3.7 | 0.16 | | |
| 14 | 16.24 | 33.273 | 24.366 | 6.28 | 112.0 | 1.6 | 0.34 | 0.5 | 0.02 | 0.27 | 0.03 | 34 | 12.2 | 12.0 | 0.19 | | |
| 20 | 16.12 | 33.300 | 24.415 | 6.30 | 112.1 | 1.8 | 0.39 | 0.5 | 0.01 | 0.28 | 0.04 | 24 | - | - | - | | |
| 30 | 14.45 | 33.241 | 24.736 | 6.56 | 112.8 | 1.6 | 0.28 | 0.3 | 0.00 | 0.34 | 0.06 | 12 | 8.5 | 8.5 | 0.19 | | |
| 33 | 14.48 | 33.299 | 24.774 | 6.56 | 112.9 | 2.2 | 0.35 | 0.3 | 0.01 | 0.25 | 0.05 | 10 | 1.7 | 1.8 | 0.21 | | |
| 80 | 11.92 | 33.353 | 25.327 | 5.88 | 96.0 | 6.1 | 0.74 | 6.8 | 0.19 | 0.38 | 0.15 | 0.4 | 0.92 | 0.49 | 0.12 | | |

RV NEW HORIZON

FRONTS I

STATION 51

| LATITUDE | | LONGITUDE | | MO/DAY/YR | | MESSENGER | | SECCHI DEPTH | | INCUBATION TIME | | LAN | | CIVIL TWILIGHT | | INTEGRATED VALUE | |
|-----------|-------|-----------|--------|-----------|-------|-----------|------|--------------|------|-----------------|-------|----------|------|-----------------|------|------------------|--|
| 31°48.2'N | | 121°08.3 | | 07/08/85 | | 1907 GMT | | 30 m | | 1307 - 2038 PST | | 1310 PST | | 2033 PST | | 148.8 mg C/m2 | |
| DEPTH | TEMP | SALINITY | SIGMA | DISS O2 | OXY | SI03 | PO4 | NO3 | NO2 | CHL | PHAEO | LIGHT | | UPTAKE (mgC/m3) | | | |
| | | | | | | | | | | | | % | 1 | 2 | MEAN | DARK | |
| 2 | 17.78 | 33.350 | 24.063 | 5.91 | 108.6 | 1.6 | 0.26 | 0.2 | 0.00 | 0.07 | 0.01 | 91 | 1.1 | 1.1 | 1.1 | 0.26 | |
| 21 | 17.65 | 33.441 | 24.165 | 5.91 | 108.4 | 1.6 | 0.27 | 0.3 | 0.01 | 0.06 | 0.01 | 34 | 3.6 | 3.5 | 3.5 | 0.17 | |
| 28 | 17.82 | 33.527 | 24.190 | 6.08 | 112.0 | 1.2 | 0.22 | 0.3 | 0.00 | 0.07 | 0.01 | 24 | - | - | - | - | |
| 41 | 16.60 | 33.589 | 24.528 | 6.17 | 111.0 | 1.9 | 0.24 | 0.3 | 0.00 | 0.06 | 0.01 | 12 | 2.2 | 2.2 | 2.2 | 0.18 | |
| 45 | 16.40 | 33.571 | 24.560 | 6.18 | 110.7 | 1.1 | 0.17 | 0.2 | 0.00 | 0.06 | 0.01 | 10 | 0.83 | 0.75 | 0.79 | 0.18 | |
| 110 | 13.81 | 33.584 | 25.136 | 5.76 | 98.0 | 2.7 | 0.31 | 1.4 | 0.07 | 0.30 | 0.19 | 0.4 | 0.31 | 0.50 | 0.40 | 0.13 | |

RV NEW HORIZON

FRONTS I

STATION 63

| LATITUDE | LONGITUDE | MO/DAY/YR | MESSENGER | SECCHI DEPTH | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE | | | | | | | |
|-----------|------------|-----------|-----------|--------------|-----------------|----------|----------------|------------------|------|------|-------|-------|-----------------|------|------|
| 32°15.6'N | 119°50.2'W | 07/09/85 | 1944 GMT | 15 m | 1305 - 2038 PST | 1305 PST | 2038 PST | 281.4 mg C/m2 | | | | | | | |
| DEPTH | TEMP | SALINITY | SIGMA | DISS O2 | OXY | SI03 | PO4 | NO3 | NO2 | CHL | PHAEO | LIGHT | UPTAKE (mgC/m3) | | |
| m | DEG C | | THETA | ml/L | PCT | um/l | um/l | um/l | um/l | ug/l | ug/l | % | 1 | 2 | |
| | | | | | | | | | | | | | MEAN | DARK | |
| 1 | 17.46 | 33.655 | 24.374 | 6.04 | 110.6 | 1.5 | 0.41 | 0.90 | 0.00 | 0.34 | 0.08 | 91 | 5.3 | 5.4 | 0.28 |
| 11 | 17.37 | 33.651 | 24.388 | 5.95 | 108.8 | 1.4 | 0.24 | 0.8 | 0.02 | 0.33 | 0.07 | 34 | 12.6 | 15.1 | 0.22 |
| 14 | 16.79 | 33.643 | 24.524 | 6.18 | 111.6 | 1.4 | 0.25 | 0.8 | 0.02 | 0.35 | 0.10 | 24 | - | - | - |
| 22 | 15.00 | 33.515 | 24.829 | 6.36 | 110.8 | 1.6 | 0.30 | 1.1 | 0.04 | 0.21 | 0.05 | 12 | 9.2 | 9.9 | 0.23 |
| 23 | 14.72 | 33.522 | 24.895 | 6.42 | 111.2 | 1.8 | 0.32 | 1.4 | 0.05 | 0.19 | 0.04 | 10 | 2.4 | 2.0 | 0.21 |
| 56 | 11.86 | 33.597 | 25.528 | 5.21 | 85.1 | 7.1 | 0.79 | 8.0 | 0.24 | 0.44 | 0.23 | 0.4 | 0.37 | 0.76 | 0.13 |

RV NEW HORIZON

FRONTS II

STATION 1 1

LATITUDE 31°08.2'N LONGITUDE 121°11.1'W MO/DAY/YR 07/13/85 MESSENGER 1840 GMT SECCHI DEPTH 26 m INCUBATION TIME 1255 - 2030 PST LAN 1311 PST CIVIL TWILIGHT 2035 PST INTEGRATED VALUE 115.8 mg C/m2

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ml/L | OXY PCT | SIO3 um/l | PO4 um/l | NO3 um/l | NO2 um/l | CHL ug/l | PHABO ug/l | LIGHT % | 1 | UPTAKE (mgC/m3) 2 | MEAN | DARK |
|------------|---------------|----------|----------------|-----------------|------------|--------------|-------------|-------------|-------------|-------------|---------------|------------|------|----------------------|------|------|
| 1 | 19.04 | 33.657 | 23.985 | 5.43 | 102.4 | 2.4 | 0.28 | 0.2 | 0.01 | 0.09 | 0.01 | 91 | 1.4 | 1.1 | 1.3 | 0.21 |
| 17 | 19.06 | 33.661 | 23.984 | 5.43 | 102.5 | 2.4 | 0.27 | 0.2 | 0.00 | 0.09 | 0.01 | 34 | 3.5 | 3.6 | 3.6 | 0.18 |
| 24 | 19.07 | 33.658 | 23.981 | 5.42 | 102.3 | 2.4 | 0.27 | 0.2 | 0.01 | 0.09 | 0.01 | 24 | - | - | - | - |
| 36 | 16.56 | 33.403 | 23.985 | 5.93 | 106.5 | 2.4 | 0.30 | 0.2 | 0.01 | 0.10 | 0.00 | 12 | 2.2 | 2.0 | 2.1 | 0.22 |
| 39 | 16.16 | 33.399 | 24.482 | 5.97 | 106.4 | 2.4 | 0.29 | 0.2 | 0.00 | 0.09 | 0.01 | 10 | 0.40 | 0.38 | 0.39 | 0.24 |
| 96 | 13.14 | 33.307 | 25.056 | 5.80 | 97.1 | 3.4 | 0.43 | 1.5 | 0.15 | 0.20 | 0.08 | 0.4 | 0.15 | 0.30 | 0.22 | 0.14 |

RV NEW HORIZON

FRONTS II

STATION 2 12

LATITUDE 30°50.9'N LONGITUDE 121°19.9'W MO/DAY/YR 07/14/85 MESSENGER 1906 GMT SECCHI DEPTH 30 m INCUBATION TIME 1412 - 2030 PST LAN 1311 PST CIVIL TWILIGHT 2035 PST INTEGRATED VALUE 97.6 mg C/m2

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ml/L | OXY PCT | SIO3 um/l | PO4 um/l | NO3 um/l | NO2 um/l | CHL ug/l | PHABO ug/l | LIGHT % | 1 | UPTAKE (mgC/m3) 2 | MEAN | DARK |
|------------|---------------|----------|----------------|-----------------|------------|--------------|-------------|-------------|-------------|-------------|---------------|------------|------|----------------------|------|------|
| 2 | 18.70 | 33.502 | 23.953 | 5.47 | 102.4 | 2.1 | 0.35 | 0.2 | 0.00 | 0.08 | 0.00 | 91 | 1.7 | 1.6 | 1.6 | 0.21 |
| 23 | 18.73 | 33.514 | 23.957 | 5.42 | 101.5 | 2.1 | 0.36 | 0.2 | 0.00 | 0.09 | 0.00 | 34 | 2.3 | 2.3 | 2.3 | 0.21 |
| 29 | 16.29 | 33.366 | 24.426 | 5.94 | 106.1 | 2.2 | 0.36 | 0.2 | 0.00 | 0.09 | 0.01 | 24 | - | - | - | - |
| 42 | 15.26 | 33.339 | 24.637 | 6.06 | 106.0 | 2.0 | 0.40 | 0.2 | 0.00 | 0.10 | 0.01 | 12 | 1.3 | 1.2 | 1.2 | 0.20 |
| 46 | 15.05 | 33.337 | 24.681 | 6.05 | 105.4 | 2.1 | 0.38 | 0.1 | 0.00 | 0.12 | 0.01 | 10 | 0.31 | 0.29 | 0.30 | 0.20 |
| 111 | 12.44 | 33.376 | 25.247 | 5.34 | 88.1 | 5.6 | 0.68 | 5.1 | 0.05 | 0.23 | 0.20 | 0.4 | 0.13 | 0.33 | 0.23 | 0.12 |

RV NEW HORIZON

FRONTS II

STATION 5 3

LATITUDE 31°35.8'N LONGITUDE 120°55.8'W MO/DAY/YR 07/15/85 MESSENGER 1858 GMT SECCHI DEPTH 30 m INCUBATION TIME 1305 - 2030 PST LAN 1306 PST CIVIL TWILIGHT 2030 PST INTEGRATED VALUE 134.0 mg C/m2

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ml/L | OXY PCT | SIO3 um/l | PO4 um/l | NO3 um/l | NO2 um/l | CHL ug/l | PHABO ug/l | LIGHT % | 1 | UPTAKE (mgC/m3) 2 | MEAN | DARK |
|------------|---------------|----------|----------------|-----------------|------------|--------------|-------------|-------------|-------------|-------------|---------------|------------|------|----------------------|------|------|
| 2 | 18.19 | 33.611 | 24.163 | 5.50 | 102.1 | 2.3 | 0.32 | 0.2 | 0.00 | 0.10 | 0.02 | 91 | 2.1 | 1.9 | 2.0 | 0.19 |
| 22 | 18.18 | 33.615 | 24.170 | 5.52 | 102.4 | 2.2 | 0.32 | 0.2 | 0.00 | 0.08 | 0.01 | 34 | 3.4 | 3.0 | 3.2 | 0.19 |
| 29 | 18.18 | 33.615 | 24.170 | 5.51 | 102.2 | 2.2 | 0.32 | 0.2 | 0.00 | 0.09 | 0.00 | 24 | - | - | - | - |
| 42 | 16.32 | 33.501 | 24.524 | 5.91 | 105.7 | 2.2 | 0.32 | 0.2 | 0.00 | 0.11 | 0.02 | 12 | 2.0 | 2.0 | 2.0 | 0.21 |
| 46 | 15.70 | 33.446 | 24.624 | 5.99 | 105.8 | 2.5 | 0.33 | 0.2 | 0.00 | 0.12 | 0.01 | 10 | 0.51 | 0.43 | 0.47 | 0.22 |
| 111 | 12.15 | 33.476 | 25.381 | 5.14 | 84.4 | 7.2 | 0.79 | 7.9 | 0.04 | 0.18 | 0.12 | 0.4 | 0.16 | 0.28 | 0.22 | 0.12 |

RV NEW HORIZON

FRONTS II

STATION 10 3

LATITUDE 32°38.0'N LONGITUDE 120°21.7'W MO/DAY/YR 07/16/85 MESSENGER 1813 GMT SECCHI DEPTH 23 m INCUBATION TIME 1307 - 2035 PST LAN 1309 PST CIVIL TWILIGHT 2039 PST INTEGRATED VALUE 272.2 mg C/m2

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ml/L | OXY PCT | SIO3 um/l | PO4 um/l | NO3 um/l | NO2 um/l | CHL ug/l | PHABO ug/l | LIGHT % | 1 | UPTAKE (mgC/m3) 2 | MEAN | DARK |
|------------|---------------|----------|----------------|-----------------|------------|--------------|-------------|-------------|-------------|-------------|---------------|------------|-----|----------------------|------|------|
| 1 | 16.64 | 33.288 | 24.285 | 5.78 | 103.9 | 1.7 | 0.39 | 0.5 | 0.01 | 0.20 | 0.05 | 91 | 5.7 | 5.7 | 5.7 | 0.19 |
| 16 | 16.41 | 33.288 | 24.285 | 5.82 | 103.9 | 1.7 | 0.41 | 0.5 | 0.01 | 0.21 | 0.08 | 34 | 8.6 | 7.7 | 8.2 | 0.22 |
| 22 | 16.02 | 33.296 | 24.434 | 5.89 | 104.6 | 1.7 | 0.39 | 0.4 | 0.01 | 0.23 | 0.08 | 24 | - | - | - | - |
| 33 | 14.40 | 33.329 | 24.815 | 6.25 | 107.4 | 2.1 | 0.44 | 0.8 | 0.03 | 0.23 | 0.07 | 12 | 5.5 | 4.9 | 5.2 | 0.17 |
| 35 | 14.03 | 33.302 | 24.871 | 6.30 | 107.5 | 2.2 | 0.47 | 0.9 | 0.03 | 0.29 | 0.07 | 10 | 1.7 | 1.5 | 1.6 | 0.19 |
| 46 | 11.21 | 33.463 | 25.543 | 4.92 | 79.2 | 10.6 | 1.06 | 12.1 | 0.03 | 0.12 | 0.13 | 0.4 | 0* | 0.06 | 0.03 | 0.32 |

* Dark uptake exceeded light uptake.

RV NEW HORIZON

FRONTS II

STATION 12 3

LATITUDE 32°09.7'N LONGITUDE 120°37.8'W MO/DAY/YR 07/17/85 MESSENGER 1823 GMT SECCHI DEPTH 23 m INCUBATION TIME 1310-2030 PST LAN 1303 PST CIVIL TWILIGHT 2033 PST INTEGRATED VALUE 322.2 mg C/m2

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ml/L | OXY PCT | SIO3 um/l | PO4 um/l | NO3 um/l | NO2 um/l | CHL ug/l | PHABO ug/l | LIGHT % | 1 | UPTAKE (mgC/m3) 2 | MEAN | DARK |
|------------|---------------|----------|----------------|-----------------|------------|--------------|-------------|-------------|-------------|-------------|---------------|------------|------|----------------------|------|------|
| 1 | 16.80 | 33.283 | 24.244 | 5.78 | 104.2 | 1.6 | 0.28 | 0.3 | 0.00 | 0.15 | 0.04 | 91 | 3.3 | 3.0 | 3.1 | 0.32 |
| 17 | 16.32 | 33.337 | 24.397 | 5.88 | 105.1 | 1.6 | 0.30 | 0.3 | 0.01 | 0.28 | 0.15 | 34 | 14.0 | 13.3 | 13.6 | 0.32 |
| 21 | 16.02 | 33.406 | 24.519 | 5.97 | 106.1 | 1.6 | 0.29 | 0.3 | 0.01 | 0.22 | 0.08 | 24 | - | - | - | - |
| 33 | 15.29 | 33.384 | 24.664 | 6.09 | 106.6 | 1.7 | 0.30 | 0.3 | 0.01 | 0.18 | 0.06 | 12 | 4.1 | 4.6 | 4.4 | 0.18 |
| 35 | 15.20 | 33.372 | 24.675 | 6.11 | 106.8 | 1.8 | 0.31 | 0.3 | 0.01 | 0.16 | 0.06 | 10 | 1.1 | 1.0 | 1.1 | 0.25 |
| 86 | 12.02 | 33.480 | 25.408 | 5.16 | 84.5 | 7.5 | 0.78 | 8.4 | 0.13 | 0.21 | 0.15 | 0.4 | 0.20 | 0.42 | 0.31 | 0.14 |

RV NEW HORIZON

FRONTS II

STATION 18 4

| LATITUDE | | LONGITUDE | | MO/DAY/YR | | MESSENGER | | SECCHI DEPTH | | INCUBATION TIME | | LAN | | CIVIL TWILIGHT | | INTEGRATED VALUE | |
|-----------|-------|------------|--------|-----------|-------|-----------|------|--------------|------|-----------------|-------|----------|------|-----------------|------|------------------|------|
| 30°47.9'N | | 121°19.2'W | | 07/18/85 | | 1904 GMT | | 31 m | | 1310 - 2040 PST | | 1311 PST | | 2035 PST | | 131.9 mg C/m2 | |
| DEPTH | TEMP | SALINITY | SIGMA | DISS O2 | OXY | SI03 | PO4 | NO3 | NO2 | CHL | PHAEO | LIGHT | 1 | UPTAKE (mgC/m3) | 2 | MEAN | DARK |
| m | DEG C | | THETA | ml/L | PCT | um/l | um/l | um/l | um/l | ug/l | ug/l | % | | | | | |
| 2 | 19.09 | 33.603 | 23.931 | 5.43 | 102.5 | 2.6 | 0.33 | 0.3 | 0.00 | 0.10 | 0.00 | 91 | 1.1 | 0.98 | 1.1 | 0.19 | |
| 23 | 18.84 | 33.568 | 23.971 | 5.45 | 102.4 | 2.6 | 0.33 | 0.3 | 0.00 | 0.10 | 0.01 | 34 | 2.5 | 3.0 | 2.7 | 0.20 | |
| 30 | 16.54 | 33.364 | 24.368 | 5.94 | 106.6 | 2.5 | 0.35 | 0.3 | 0.00 | 0.11 | 0.01 | 24 | - | - | - | - | |
| 44 | 15.41 | 33.340 | 24.606 | 6.05 | 106.1 | 2.5 | 0.34 | 0.3 | 0.00 | 0.12 | 0.02 | 12 | 2.1 | 1.9 | 2.0 | 0.22 | |
| 47 | 15.26 | 33.332 | 24.633 | 6.08 | 106.3 | 2.5 | 0.34 | 0.3 | 0.00 | 0.14 | 0.02 | 10 | 0.75 | 0.68 | 0.71 | 0.21 | |
| 115 | 12.46 | 33.390 | 25.255 | 5.30 | 87.5 | 5.8 | 0.68 | 5.5 | 0.05 | 0.16 | 0.25 | 0.4 | 0.26 | 0.45 | 0.36 | 0.10 | |

RV NEW HORIZON

FRONTS II

STATION 20 4

| LATITUDE | LONGITUDE | MO/DAY/YR | MESSENGER | SECCHI DEPTH | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE | | | | | | | | |
|-----------|------------|-----------|-----------|--------------|-----------------|----------|----------------|---------------------------|------|------|-------|-------|-----------------|------|------|------|
| 31°22.4'N | 121°03.8'W | 07/19/85 | 1819 GMT | 31 m | 1242 - 2030 PST | 1311 PST | 2035 PST | 158.6 mg C/m ² | | | | | | | | |
| DEPTH | TEMP | SALINITY | SIGMA | DISS O2 | OXY | SI03 | PO4 | NO3 | NO2 | CHL | PHAEO | LIGHT | UPTAKE (mgC/m3) | | | |
| m | DEG C | | THETA | ml/L | PCT | um/l | um/l | um/l | um/l | ug/l | ug/l | % | 1 | 2 | | |
| | | | | | | | | | | | | | MEAN | DARK | | |
| 2 | 18.83 | 33.485 | 23.909 | 5.44 | 102.1 | 3.0 | 0.33 | 0.0 | 0.00 | 0.08 | 0.01 | 91 | 0.76 | 0.62 | 0.69 | 0.15 |
| 23 | 18.69 | 33.557 | 23.998 | 5.48 | 102.6 | 3.0 | 0.32 | 0.0 | 0.00 | 0.09 | 0.12 | 34 | 3.4 | 2.9 | 3.1 | 0.18 |
| 30 | 16.86 | 33.394 | 24.317 | 5.87 | 106.0 | 3.1 | 0.34 | 0.0 | 0.00 | 0.12 | 0.02 | 24 | - | - | - | - |
| 44 | 15.46 | 33.359 | 24.609 | 6.06 | 106.4 | 3.0 | 0.34 | 0.0 | 0.00 | 0.12 | 0.02 | 12 | 2.8 | 3.0 | 2.9 | 0.20 |
| 47 | 15.19 | 33.348 | 24.660 | 6.04 | 105.5 | 3.0 | 0.34 | 0.0 | 0.00 | 0.14 | 0.02 | 10 | 1.0 | 1.0 | 1.0 | 0.23 |
| 115 | 12.10 | 33.417 | 25.345 | 5.10 | 83.6 | 6.6 | 0.79 | 7.0 | 0.03 | 0.19 | 0.19 | 0.4 | 0.34 | 0.53 | 0.43 | 0.12 |

RV NEW HORIZON

FRONTS II

STATION 26 4

| LATITUDE | LONGITUDE | MO/DAY/YR | MESSENGER | SECCHI DEPTH | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE | | | | | | | | |
|-----------|------------|-----------|-----------|--------------|-----------------|----------|----------------|------------------|------|------|-------|-------|-----------------|------|------|------|
| 32°40.6'N | 120°19.4'W | 07/20/85 | 1823 GMT | 21 m | 1308 - 2039 PST | 1307 PST | 2034 PST | 332.6 mg C/m2 | | | | | | | | |
| DEPTH | TEMP | SALINITY | SIGMA | DISS O2 | OXY | SI03 | PO4 | NO3 | NO2 | CHL | PHAEO | LIGHT | UPTAKE (mgC/m3) | | | |
| m | DEG C | | THETA | ml/L | PCT | um/l | um/l | um/l | um/l | ug/l | ug/l | % | 1 | 2 | | |
| | | | | | | | | | | | | | MEAN | DARK | | |
| 1 | | 33.339 | | 5.79 | | 2.1 | 0.39 | 0.1 | 0.00 | 0.14 | 0.04 | 91 | 3.1 | 1.6 | 2.3 | 0.23 |
| 15 | | 33.398 | | 5.96 | | 2.6 | 0.41 | 0.2 | 0.02 | 0.22 | 0.10 | 34 | 12.3 | 9.8 | 11.1 | 0.24 |
| 20 | | 33.411 | | 6.03 | | 2.4 | 0.44 | 0.3 | 0.02 | 0.19 | 0.10 | 24 | - | - | - | - |
| 29 | | 33.402 | | 6.32 | | 2.7 | 0.53 | 1.0 | 0.04 | 0.36 | 0.13 | 12 | 9.8 | 9.3 | 9.6 | 0.21 |
| 30 | | 33.414 | | 6.30 | | 2.9 | 0.49 | 1.1 | 0.05 | 0.36 | 0.13 | 10 | 3.9 | 3.3 | 3.6 | 0.24 |
| 75 | | 33.430 | | 5.15 | | 10.2 | 1.11 | 11.3 | 0.09 | 0.12 | 0.07 | 0.4 | 0.12 | 0.23 | 0.18 | 0.12 |

RV NEW HORIZON

FRONTS II

STATION 28 3

| LATITUDE | LONGITUDE | MO/DAY/YR | MESSENGER | SECCHI DEPTH | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE | | | | | | | | |
|-----------|------------|-----------|-----------|--------------|-----------------|----------|----------------|------------------|------|------|-------|-------|-----------------|------|------|------|
| 32°25.5'N | 121°21.4'W | 07/21/85 | 1817 GMT | 13 m | 1257 - 2031 PST | 1304 PST | 2035 PST | 208.7 mg C/m2 | | | | | | | | |
| DEPTH | TEMP | SALINITY | SIGMA | DISS O2 | OXY | SI03 | PO4 | NO3 | NO2 | CHL | PHAEO | LIGHT | UPTAKE (mgC/m3) | | | |
| m | DEG C | | THETA | ml/L | PCT | um/l | um/l | um/l | um/l | ug/l | ug/l | % | 1 | 2 | | |
| | | | | | | | | | | | | | MEAN | DARK | | |
| 1 | 16.80 | 33.306 | 24.261 | 5.80 | 104.6 | 2.8 | 0.37 | 0.2 | 0.01 | 0.31 | 0.04 | 91 | 3.0 | 3.3 | 3.1 | 0.19 |
| 9 | 16.83 | 33.319 | 24.267 | 5.82 | 105.0 | 2.8 | 0.38 | 0.2 | 0.01 | 0.32 | 0.02 | 34 | 13.4 | 11.8 | 12.6 | 0.20 |
| 12 | 16.82 | 33.326 | 24.273 | 5.83 | 105.2 | 2.9 | 0.38 | 0.3 | 0.02 | 0.33 | 0.1 | 24 | - | - | - | - |
| 19 | 16.57 | 33.358 | 24.357 | 5.90 | 105.9 | 3.2 | 0.40 | 0.5 | 0.02 | 0.33 | 0.05 | 12 | 7.0 | 7.1 | 7.0 | 0.24 |
| 21 | 16.36 | 33.371 | 24.414 | 5.92 | 105.9 | 3.3 | 0.43 | 0.9 | 0.03 | 0.35 | 0.06 | 10 | 2.6 | 2.1 | 2.4 | 0.21 |
| 48 | 14.69 | 33.240 | 24.685 | 6.14 | 106.1 | 3.2 | 0.43 | 0.6 | 0.01 | 0.33 | 0.08 | 0.4 | 0.12 | 0.32 | 0.22 | 0.16 |

FRONTS LEG II MACROZOOPLANKTON BIOMASS

BONGO Nets 71 cm mouth diameter

Net Mesh Size 0.505 mm

| Station | Date 1985 | Time (local) | | Water Volume Strained (m ³) | | Volume (cm ³) per 1000 m ³ Filtered | |
|---------|--------------|--------------|------|--|------|---|------|
| | | Start | Stop | Port | Stbd | Port | Stbd |
| 2 | 7/13 | 1546 | 1608 | 347 | 334 | 35 | 36 |
| 2 | 7/13 | 1637 | 1659 | 330 | 329 | 46 | 36 |
| 2 | 7/13 | 1703 | 1725 | 338 | 339 | 36 | 32 |
| 2 | 7/14 | 0015 | 0038 | 322 | 322 | 102 | 78 |
| 2 | 7/14 | 0044 | 0106 | 321 | 321 | 78 | 78 |
| 2 | 7/14 | 0113 | 0135 | 318 | 324 | 69 | 93 |
| 3 | 7/15 | 0133 | 0153 | 266 | 266 | 113 | 105 |
| 3 | 7/15 | 0202 | 0224 | 315 | 315 | 98 | 95 |
| 3 | 7/15 | 0230 | 0253 | 336 | 342 | 92 | 88 |
| 5 | 7/15 | 1236 | 1259 | 297 | 296 | 98 | 101 |
| 5 | 7/15 | 1303 | 1325 | 312 | 310 | 96 | 87 |
| 5 | 7/15 | 1330 | 1353 | 308 | 305 | 101 | 92 |
| 7 | 7/15 | 1737 | 1759 | 311 | 309 | 263 | 214 |
| 7 | 7/15 | 1807 | 1829 | 304 | 301 | 198 | 183 |
| 7 | 7/15 | 1835 | 1857 | 300 | 298 | 173 | 171 |
| 9 | 7/16 | 0120 | 0143 | 342 | 338 | 161 | 151 |
| 9 | 7/16 | 0149 | 0211 | 343 | 341 | 119 | 141 |
| 9 | 7/16 | 0219 | 0242 | 358 | 356 | 140 | 132 |
| 10 | 7/16 | 1621 | 1642 | 295 | 293 | 227 | 212 |
| 10 | 7/16 | 1653 | 1714 | 300 | 297 | 206 | 189 |
| 10 | 7/16 | 1723 | 1744 | 299 | 296 | 227 | 206 |
| 10 | 7/17 | 0016 | 0039 | 319 | 315 | 251 | 228 |
| 10 | 7/17 | 0047 | 0109 | 322 | 319 | 221 | 213 |
| 10 | 7/17 | 0118 | 0140 | 350 | 346 | 243 | 254 |
| 11 | 7/17 | 0552 | 0614 | 321 | 317 | 109 | 110 |
| 12 | 7/17 | 1209 | 1230 | 321 | 318 | 162 | 179 |
| 13 | 7/17 | 1405 | 1426 | 319 | 315 | 135 | 143 |
| 14 | 7/17 | 1708 | 1729 | 292 | 288 | 175 | 177 |
| 15 | 7/17 | 2001 | 2023 | 303 | 297 | 99 | 104 |
| 16 | 7/17 | 2320 | 2342 | 312 | 308 | 119 | 114 |
| 17 | 7/18 | 0249 | 0310 | 297 | 292 | 94 | 93 |
| 18 | 7/18 | 1016 | 1038 | 313 | 310 | 70 | 71 |
| 18 | 7/19 | 0044 | 0106 | 305 | 301 | 88 | 100 |
| 19 | 7/19 | 0454 | 0516 | 301 | 297 | 86 | 84 |
| 20 | 7/19 | 0811 | 0832 | 314 | 311 | 70 | 74 |
| 21 | 7/19 | 1325 | 1346 | 296 | 301 | 91 | 96 |
| 22 | 7/19 | 1659 | 1720 | 287 | 284 | 157 | 137 |
| 23 | 7/19 | 2034 | 2055 | 286 | 284 | 154 | 159 |
| 24 | 7/20 | 0018 | 0040 | 317 | 312 | 180 | 176 |
| 25 | 7/20 | 0344 | 0406 | 323 | 318 | 152 | 129 |
| 26 | 7/20 | 1000 | 1021 | 288 | 285 | 260 | 253 |
| 26 | 7/21 | 0018 | 0040 | 335 | 319 | 209 | 197 |

FRONTS LEG II MACROZOOPLANKTON BIOMASS

BONGO Nets 71 cm mouth diameter

Net Mesh Size 0.505 mm

| Station | Date 1985 | Time (local) | | Water Volume Strained (m ³) | | Volume (cm ³) per 1000 m ³ Filtered | |
|---------|--------------|--------------|------|--|------|---|------|
| | | Start | Stop | Port | Stbd | Port | Stbd |
| 27 | 7/21 | 0617 | 0628 | 320 | 316 | 194 | 177 |
| 28 | 7/21 | 1129 | 1150 | 313 | 309 | 144 | 123 |
| 29 | 7/21 | 1402 | 1423 | 333 | 316 | 201 | 193 |
| 30 | 7/21 | 1645 | 1707 | 312 | 302 | 144 | 126 |
| 31 | 7/21 | 1925 | 1947 | 349 | 347 | 146 | 115 |
| 32 | 7/21 | 2216 | 2238 | 312 | 332 | 195 | 154 |
| 33 | 7/22 | 0102 | 0122 | 239 | 240 | 113 | 96 |
| 33 | 7/22 | 0138 | 0200 | 334 | 326 | 120 | 129 |
| 34 | 7/22 | 0501 | 0523 | 327 | 325 | 128 | 129 |
| 35 | 7/22 | 0737 | 0759 | 312 | 304 | 164 | 148 |
| 36 | 7/22 | 1130 | 1153 | 334 | 330 | 93 | 106 |
| 37 | 7/22 | 1507 | 1549 | 363 | 343 | 88 | 90 |

FRONTS LEG II MACROZOOPLANKTON BIOMASS
MOCNESS 1 m³ mouth area
Net Mesh Size 0.333 mm

| Station | Tow No. | Date 1985 | Time (Local) | | Sample No. | Depth (m) | Water Volume Strained (m ³) | Volume (cm ³) per 1000 m ³ Filtered |
|---------|---------|--------------|--------------|------|------------|-----------|--|---|
| 2 | MOC-1 | 7/14 | 1324 | 1608 | MOC 1-1 | 1000-850 | 520 | 89 |
| | | | | | MOC 1-2 | 850-700 | 422 | 70 |
| | | | | | MOC 1-3 | 700-550 | 473 | 36 |
| | | | | | MOC 1-4 | 550-400 | 812 | 20 |
| | | | | | MOC 1-5 | 400-300 | 277 | 62 |
| | | | | | MOC 1-6 | 300-250 | 216 | 91 |
| | | | | | MOC 1-7 | 250-225 | 146 | 101 |
| | | | | | MOC 1-8 | 225-190 | 154 | 138 |
| | | | | | MOC 1-9 | 190-0 | 1650 | 57 |
| | | | | | MOC 1-11 | 190-175 | 164 | 122 |
| | | | | | MOC 1-12 | 175-150 | 356 | 81 |
| | | | | | MOC 1-13 | 150-125 | 173 | 88 |
| | | | | | MOC 1-14 | 125-100 | 263 | 72 |
| | | | | | MOC 1-15 | 100-72 | 223 | 81 |
| | | | | | MOC 1-16 | 72-50 | 154 | 179 |
| | | | | | MOC 1-17 | 50-25 | 178 | 102 |
| | | | | | MOC 1-18 | 25-0 | 139 | 92 |
| 2 | MOC-2 | 7/14 | 2028 | 2317 | MOC 2-1 | 1000-845 | 608 | 50 |
| | | | | | MOC 2-2 | 845-700 | 390 | 62 |
| | | | | | MOC 2-3 | 700-545 | 525 | 46 |
| | | | | | MOC 2-4 | 545-400 | 530 | 44 |
| | | | | | MOC 2-5 | 400-300 | 377 | 74 |
| | | | | | MOC 2-6 | 300-250 | 283 | 76 |
| | | | | | MOC 2-7 | 250-225 | 148 | 101 |
| | | | | | MOC 2-8 | 225-200 | 209 | 100 |
| | | | | | MOC 2-9 | 200-0 | 1409 | 83 |
| | | | | | MOC 2-11 | 192-175 | 225 | 85 |
| | | | | | MOC 2-12 | 175-150 | 170 | 122 |
| | | | | | MOC 2-13 | 150-125 | 235 | 112 |
| | | | | | MOC 2-14 | 125-100 | 214 | 120 |
| | | | | | MOC 2-15 | 100-75 | 138 | 165 |
| | | | | | MOC 2-16 | 75-50 | 155 | 197 |
| | | | | | MOC 2-17 | 50-25 | 131 | 161 |
| | | | | | MOC 2-18 | 25-0 | 141 | 162 |
| 10 | MOC-3 | 7/16 | 1220 | 1502 | MOC 3-1 | 975-820 | 371 | 81 |
| | | | | | MOC 3-2 | 820-700 | 522 | 125 |
| | | | | | MOC 3-3 | 700-550 | 503 | 121 |
| | | | | | MOC 3-4 | 550-400 | 773 | 84 |
| | | | | | MOC 3-5 | 400-300 | 386 | 64 |
| | | | | | MOC 3-6 | 300-250 | 259 | 104 |
| | | | | | MOC 3-7 | 250-225 | 191 | 118 |
| | | | | | MOC 3-8 | 225-200 | 162 | 184 |
| | | | | | MOC 3-9 | 200-0 | 1277 | 195 |
| | | | | | MOC 3-11 | 195-165 | 165 | 132 |
| | | | | | MOC 3-12 | 165-150 | 122 | 171 |

FRONTS LEG II MACROZOOPLANKTON BIOMASS
MOCNESS 1 m³ mouth area
Net Mesh Size 0.333 mm

| Station | Tow No. | Date 1985 | Time (Local) | | Sample No. | Depth (m) | Water Volume Strained (m ³) | Volume (cm ³) per 1000 m ³ Filtered |
|---------------------------------------|---------|--------------|--------------|------|------------|-----------|--|---|
| | | | | | MOC 3-13 | 150-125 | 212 | 169 |
| | | | | | MOC 3-14 | 125-100 | 146 | 237 |
| | | | | | MOC 3-15 | 100- | * | * |
| | | | | | MOC 3-16 | -50 | 312 | 473 |
| | | | | | MOC 3-17 | 50-25 | 173 | 598 |
| | | | | | MOC 3-18 | 25-0 | 147 | 344 |
| * Samples combined due to net failure | | | | | | | | |
| 10 | MOC-4 | 7/16 | 2023 | 2250 | MOC 4-1 | 1000-825 | 557 | 63 |
| | | | | | MOC 4-2 | 825-700 | 442 | 109 |
| | | | | | MOC 4-3 | 700-550 | 405 | 143 |
| | | | | | MOC 4-4 | 550-400 | 404 | 123 |
| | | | | | MOC 4-5 | 400-300 | 335 | 90 |
| | | | | | MOC 4-6 | 300-250 | 142 | 154 |
| | | | | | MOC 4-7 | 250-225 | 156 | 163 |
| | | | | | MOC 4-8 | 225-200 | 160 | 255 |
| | | | | | MOC 4-9 | 200-0 | 893 | 199 |
| | | | | | MOC 4-11 | 190-175 | 64 | 289 |
| | | | | | MOC 4-12 | 175-150 | 153 | 239 |
| | | | | | MOC 4-13 | 150-125 | 95 | 331 |
| | | | | | MOC 4-14 | 125-100 | 117 | 392 |
| | | | | | MOC 4-15 | 100-75 | 130 | 341 |
| | | | | | MOC 4-16 | 75-50 | 82 | 620 |
| | | | | | MOC 4-17 | 50-25 | 111 | 856 |
| | | | | | MOC 4-18 | 25-0 | 141 | 571 |
| 18 | MOC-5 | 7/18 | 1222 | 1506 | MOC 5-1 | 1000-850 | 427 | 61 |
| | | | | | MOC 5-2 | 850-700 | 892 | 43 |
| | | | | | MOC 5-3 | 700-550 | 528 | 37 |
| | | | | | MOC 5-4 | 550-400 | 602 | 34 |
| | | | | | MOC 5-5 | 400-300 | 435 | 68 |
| | | | | | MOC 5-6 | 300-250 | 243 | 97 |
| | | | | | MOC 5-7 | 250-225 | 183 | 110 |
| | | | | | MOC 5-8 | 225-200 | 177 | 115 |
| | | | | | MOC 5-9 | 200-0 | 1390 | 51 |
| | | | | | MOC 5-11 | 200-175 | 174 | 97 |
| | | | | | MOC 5-12 | 175-150 | 196 | 152 |
| | | | | | MOC 5-13 | 150-125 | 181 | 111 |
| | | | | | MOC 5-14 | 125-100 | 172 | 130 |
| | | | | | MOC 5-15 | 100-75 | 150 | 285 |
| | | | | | MOC 5-16 | 75-50 | 157 | 119 |
| | | | | | MOC 5-17 | 50-25 | 190 | 83 |
| | | | | | MOC 5-18 | 25-0 | 170 | 75 |
| 18 | MOC-6 | 7/18 | 2108 | 0002 | MOC 6-1 | 1000-812 | 814 | 27 |
| | | | | | MOC 6-2 | 812-700 | 382 | 33 |
| | | | | | MOC 6-3 | 700-550 | 605 | 27 |

FRONTS LEG II MACROZOOPLANKTON BIOMASS

MOCNESS 1 m² mouth area

Net Mesh Size 0.333 mm

| Station | Tow No. | Date | | Time (Local) | | Sample No. | Depth (m) | Water Volume Strained (m ³) | Volume (cm ³) per 1000 m ³ Filtered |
|---------|---------|------|--|--------------|------|------------|-----------|--|---|
| | | 1985 | | Start | Stop | | | | |
| | | | | | | MOC 6-4 | 550-400 | 578 | 34 |
| | | | | | | MOC 6-5 | 400-300 | 485 | 56 |
| | | | | | | MOC 6-6 | 300-250 | 255 | 102 |
| | | | | | | MOC 6-7 | 250-225 | 135 | 132 |
| | | | | | | MOC 6-8 | 225-200 | 168 | 131 |
| | | | | | | MOC 6-9 | 200-0 | 1546 | 72 |
| | | | | | | MOC 6-11 | 200-175 | 260 | 96 |
| | | | | | | MOC 6-12 | 175-150 | 231 | 114 |
| | | | | | | MOC 6-13 | 150-125 | 149 | 133 |
| | | | | | | MOC 6-14 | 125-100 | 183 | 136 |
| | | | | | | MOC 6-15 | 100-75 | 166 | 209 |
| | | | | | | MOC 6-16 | 75-50 | 228 | ** |
| | | | | | | MOC 6-17 | 50-25 | 176 | 153 |
| | | | | | | MOC 6-18 | 25-0 | 153 | 231 |
| | | | | | | | | | ** Cod end lost |
| 26 | MOC-7 | 7/20 | | 1213 | 1502 | MOC 7-1 | 1000-830 | 598 | 50 |
| | | | | | | MOC 7-2 | 830-700 | 471 | 76 |
| | | | | | | MOC 7-3 | 700-550 | 767 | 47 |
| | | | | | | MOC 7-4 | 550-400 | 614 | 58 |
| | | | | | | MOC 7-5 | 400-300 | 505 | 89 |
| | | | | | | MOC 7-6 | 300-250 | 179 | 126 |
| | | | | | | MOC 7-7 | 250-225 | 112 | |
| | | | | | | MOC 7-8 | 225-200 | 128 | 278 |
| | | | | | | MOC 7-9 | 200-0 | 1183 | 199 |
| | | | | | | MOC 7-11 | 200-175 | 262 | 148 |
| | | | | | | MOC 7-12 | 175-150 | 154 | 161 |
| | | | | | | MOC 7-13 | 150-120 | 125 | 324 |
| | | | | | | MOC 7-14 | 120-100 | 81 | 386 |
| | | | | | | MOC 7-15 | 100-75 | 129 | 389 |
| | | | | | | MOC 7-16 | 75-50 | 149 | 565 |
| | | | | | | MOC 7-17 | 50-25 | 120 | 765 |
| | | | | | | MOC 7-18 | 25-0 | 163 | 188 |
| 26 | MOC-8 | 7/20 | | 2011 | 2315 | MOC 8-1 | 1000-820 | 676 | 48 |
| | | | | | | MOC 8-2 | 820-700 | 496 | 51 |
| | | | | | | MOC 8-3 | 700-540 | 449 | 54 |
| | | | | | | MOC 8-4 | 540-400 | 587 | 93 |
| | | | | | | MOC 8-5 | 400-300 | 420 | 94 |
| | | | | | | MOC 8-6 | 300-250 | 367 | 127 |
| | | | | | | MOC 8-7 | 250-210 | 257 | 169 |
| | | | | | | MOC 8-8 | 227-192 | 360 | 163 |
| | | | | | | MOC 8-9 | 200-0 | 1141 | 218 |
| | | | | | | MOC 8-11 | 190-175 | 76 | 250 |
| | | | | | | MOC 8-12 | 175-150 | 168 | 199 |
| | | | | | | MOC 8-13 | 150-125 | 241 | 268 |
| | | | | | | MOC 8-14 | 125-100 | 105 | 387 |

FRONTS LEG II MACROZOOPLANKTON BIOMASS

MOCNESS 1 m² mouth area

Net Mesh Size 0.333 mm

| Station | Tow No. | Date 1985 | Time (Local) | | Sample No. | Depth (m) | Water Volume Strained (m ³) | Volume (cm ³) per 1000 m ³ Filtered |
|---------|---------|--------------|--------------|------|------------|-----------|--|---|
| | | | Start | Stop | | | | |
| | | | | | MOC 8-15 | 100-75 | 111 | 511 |
| | | | | | MOC 8-16 | 75-50 | 191 | 497 |
| | | | | | MOC 8-17 | 50-25 | 133 | 744 |
| | | | | | MOC 8-18 | 25-0 | 116 | 1079 |

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